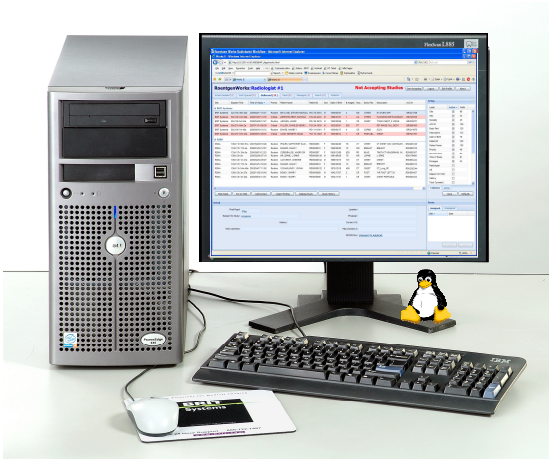
User Manual



BRIT Roentgen Works Flow Site Coordinator

June 2009

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BRIT Systems
Leader of the PACS

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Chapter 1 – Introduction

The BRIT Roentgen Works Flow application is a service for Radiologist to provide remote reading services for multiple healthcare facilities. It is designed to allow independent reading groups to compete with the largest groups for reading contracts and provides superior tools for the specific needs of the unique environment. Roentgen Works Flow includes an additional layer of functionality to efficiently support, report, and track the preliminary and final diagnosis in the reading environment. It also allows the Radiologist to quickly identify critical studies or those with urgent finding and communicate efficiently with the referring physician using the latest Web technologies and web-based calling tools for communications.

Roentgen Works Flow provides a variety of improvements over the current methods of working with a typical client site. These improvements include:

- Efficient support for multiple remote customers
- Powerful application to accommodate duplicate studies and patient ID
- Application that can handle multiple HL-7 links for returns of reports
- Reduce, or even eliminate client order entry
- Easy access to comparisons studies
- Efficient load balancing and distribution based on rules
- Eliminate staff handing distribution of studies or order information
- Provide easy to find and use contact information for referring physicians
- Provide electronic methods of tracking for on-hold and urgent findings
- Eliminates staff for transcription and report distribution
- Provides statistics for management and billing purposes
- System that handles security issues for multiple sites

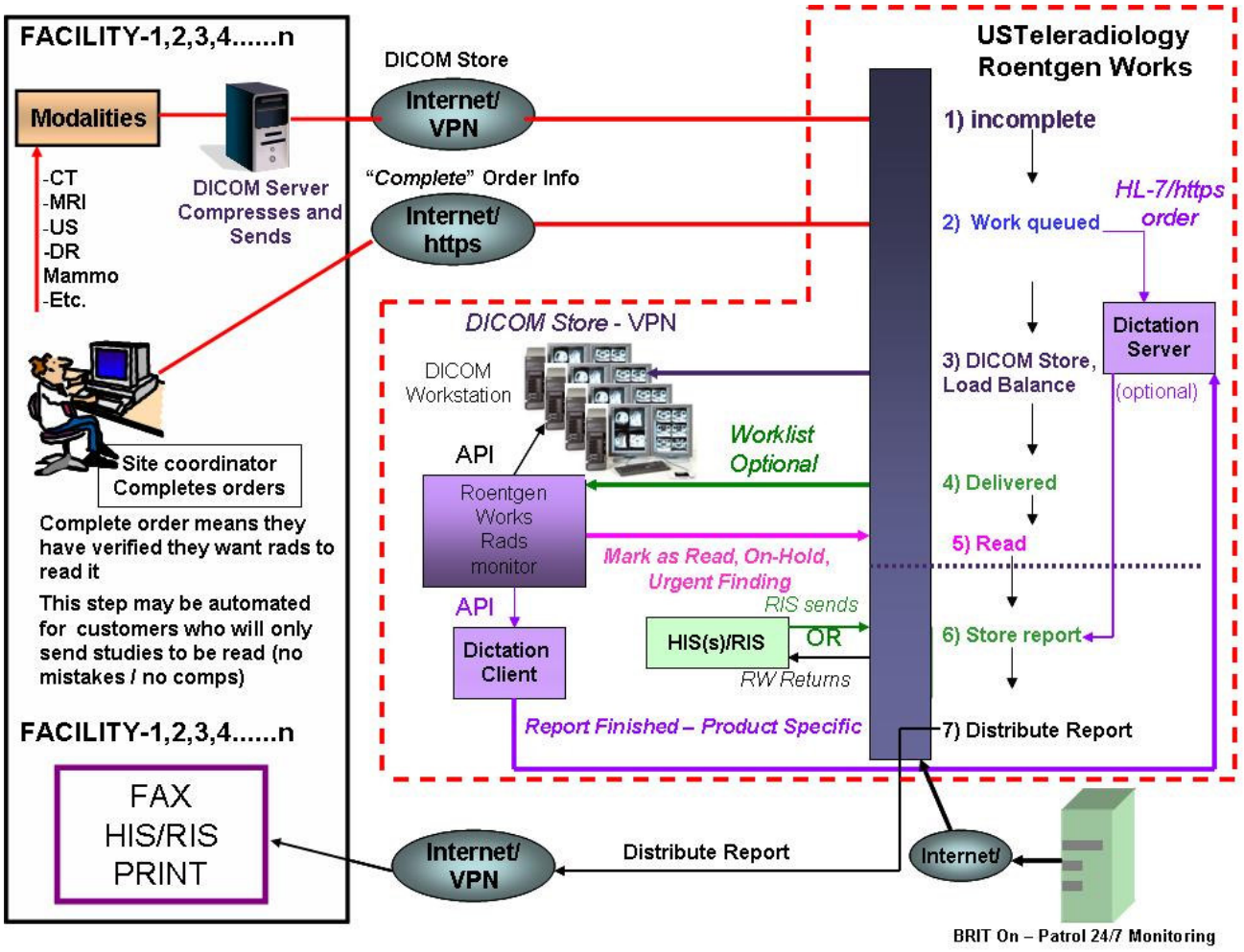
Roentgen Works Flow also provides the Radiologist with some workflow tools to efficiently take the following actions:

- Easily open the study when integrated with BRIT Vision by double-clicking on the study in the Delivered list
- Put studies “on-hold”
- Mark studies as “urgent”
- Locate the contact number and use Skype or BRIT Phone to place the call
- Communicate with the Site Coordinator when “incomplete” studies are received and additional information is needed.
- Easily customize the information they specifically need on each of the windows.
- “View the Study History” provides an audit trail of details and timing of each event regarding the study

Workflow

This identifies the workflow between the Roentgen Works Flow system and the Radiologist for the Site Coordinator's information. There are occasions when the Site Coordinator gets involved with the Radiologist's workflow for items such as helping resolve issues with studies placed "On-Hold", ensuring the referring physician is contacted for studies tagged as "Urgent", or replying to messages from the various users. This section is intended to provide the Site Coordinator with an overview of the Radiologist's workflow.

The workflow of the Roentgen Works Flow product is as follows:



For the workflow:

1. The modality sends the images to the BRIT Server.
2. The BRIT system compresses the images, regenerates the Order from the DICOM Meta data, and sends it via DICOM store over the Internet or VPN to the Reading Group.
3. If the Order is incomplete, the study is placed in the Incomplete Orders [365] tab for the Site Coordinator.
4. The Site Coordinator verifies that they want the Radiologists to read the study, and completes the Order, and it is again sent over the Internet or the VPN to the Reading Group and is placed in the Work Queued [2] tab.
5. The Order information is sent via HL-7 to the Dictation server, if the integration is done between the Roentgen Works server and the Dictation server.
6. The Radiologist logs into the system and selects Start Accepting to begin accepting studies.
7. The system automatically load balances the studies and assigns the study to the Radiologist based on rules and Radiologist licensing permissions, or the Service Manager may assign the study if necessary.
8. The study appears in the Delivered [1] tab.
9. The Radiologist can double-click on the study to open the images on the workstation if the API integration is available between Roentgen Works and the viewing workstation. (If BRIT Vision is available, the API is inherent in the application.) The Radiologist looks at the images in the study and either dictates the report, puts the study on hold because additional information is required, or flags the study as urgent and contacts the referring physician.
   a. Tag a study with “Urgent” findings in order to quickly contact the referring physician
      i. The study is moved to the Actions Needed [7] tab to await completion.
      ii. BRIT Phone calls the referring physician to alert them to the “urgent” information.
      iii. The study “Update Urgent” finding is acknowledged by the referring physician.
      iv. The Site Coordinator marks updates the urgent finding to “complete”, and the study is returned to the Delivered [1] tab if the Radiologist has not marked the study as “Read”, or it can be returned to the Read [27] tab if study is marked as “Read”.
   b. Put the study “On-Hold” due to missing information regarding the study or the patient.
      i. The study is moved to the Actions Needed [7] tab to await completion.
      ii. The Site Coordinator fills in the required fields and completes the study.
      iii. The study is released from hold.
      iv. The study is returned to the Delivered [1] tab for the Radiologist to complete the report.
10. The Study is marked as “Read”.
11. The report is dictated by the Radiologist.
12. The Radiologist signs the report, and the report is stored on the server.
13. The study is moved to the Read [27] tab.
14. The referring physicians can request an addendum from the Radiologist.
    a. The addendum is added by the radiologist and the report is updated.
    b. The report addendum is signed.
15. The system adds any urgent findings to the report, if applicable.
16. The report is distributed via e-mail, fax, or HL-7 services.

Quick Start

This section provides a roadmap or quick start path for starting the application and following the different steps that the Site Coordinator would go through from logging in assigning studies that were not automatically assigned, or were returned, or responding to Actions Needed, or Messages..

Log in, handle actions that are needed, handle unassigned studies, and check on and reply to messages, handle users or modalities, view statistics.

These first steps allows the user login, check on the Actions needed, and assist in obtaining missing data for studies "On-Hold".

Select the icon and log in

Select Actions Needed [7] to handle issues

If the study is "On-Hold" get the missing data to enter

The next three steps determine what is needed for "incomplete" studies and assist in resolving the issue.

Complete the missing data

Select the Incomplete Orders [365] to enter missing data

If the study is "Incomplete" find out what is missing

The last three steps include replying to or sending messages, handling addition, editing, or deleting users or modalities as necessary, and viewing statistics.

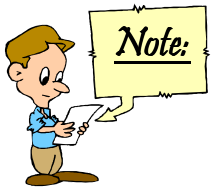
Reply to or Send any messages

Add, edit, or delete any Users or Modalities as necessary

View Statistics for overall system performance

Starting the Roentgen Works Application

This application is started from Firefox, Safari, or Internet Explorer 7, web browser by entering the URL/Address of the application. Each user must have a log in. Click on the icon and the log in window opens.



Internet Explorer 7 is not recommended due to performance issues with the browser.

Enter the User ID and Password, and click on the Login button.

Depending on the user, one of four windows opens:

- **Site Coordinator** (at the Hospital or Imaging Center site)
- **Services Manager** (at the Reading Services group site)
- **Radiologist**
- **Technologist**

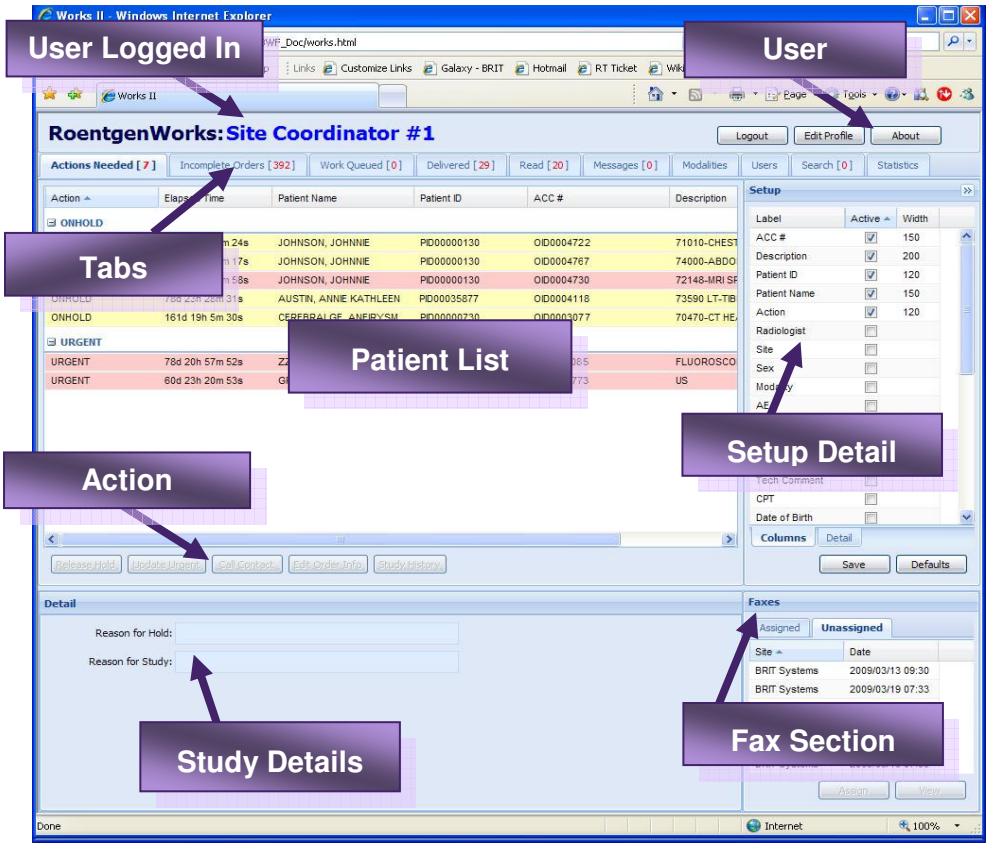
This manual covers the user information for the **Site Coordinator** at the hospital or imaging center.

Logging Out

When the user needs to log out, click on the Logout button at the top right portion of the window. The system logs the user out and returns to the login window.

Components of the Roentgen Works Window

When the user has logged in, and the application opens, the following window opens:



There are several components to this window, which include:

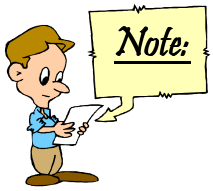
- **User Logged In** – Identifies the current user logged into the system.
- **User Buttons** – Contains the buttons for the User to logout, change their profile, or to get systems information.
- **Tabs** – Identifies the various worklists available. These include:
  - Action Needed
  - Incomplete Orders
  - Work Queued
  - Delivered
  - Read
  - Messages
  - Modalities
  - Users
  - Search
  - Statistics
- **Patient List** – Displays the list of patients for each site, and includes routine and critical studies. The Patient List contains the information from the fields selected from the Setup Detail section.
- **Setup** – Allows the user to customize the fields in the patient list as well as the Details panel at the bottom of the window.

- **Action Buttons** – Contains a selection of toolbar buttons which allow the user to perform specific additional functions on the study. These are different for each individual tab.

- **Details** – Provides the details for the selected study, and can be customized according to the individual user. Some of the details that can be included are:

  - Reason for Hold
  - Reason for Study
  - History
  - Radiologist
  - Tech Comment

- **Fax Section** – Allows the user to assign and view faxes that have been sent with the Order information.



On each of the tabs there are a variety of buttons and are covered in the section specific to the tab.

The components of each of the tabs are similar and are covered specifically for each tab.

User Logged In

This identifies the user that is currently logged into the system, and displays in the upper right side of the window, as: **RoentgenWorks: Service Manager #1**

Tabs

Each section for the tabs is covered in the following chapters.

These tabs all have very similar screen setups, but have different purposes. They include:

- **Action Needed**
- **Incomplete Orders**
- **Work Queued**
- **Delivered**
- **Read**
- **Messages**
- **Modalities**
- **Users**
- **Search**
- **Statistics**

Each of these tabs is explained in their own individual chapter.

The number in red next to each tab indicates the number of studies contained in the tab.

Patient List

The Patient List section provides a list of studies with varying detail, depending on which tab is selected and how the user has customized the Setup. For example in the Delivered tab, the following information is provided for the patients:

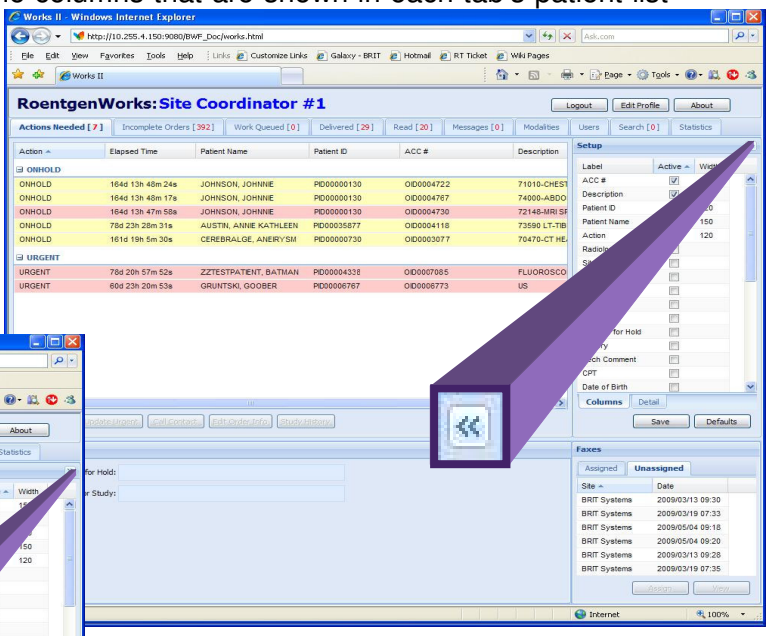
- **Action**
- **Site**
- **Patient Name**
- **Patient ID**
- **Acc#**
- **Description**

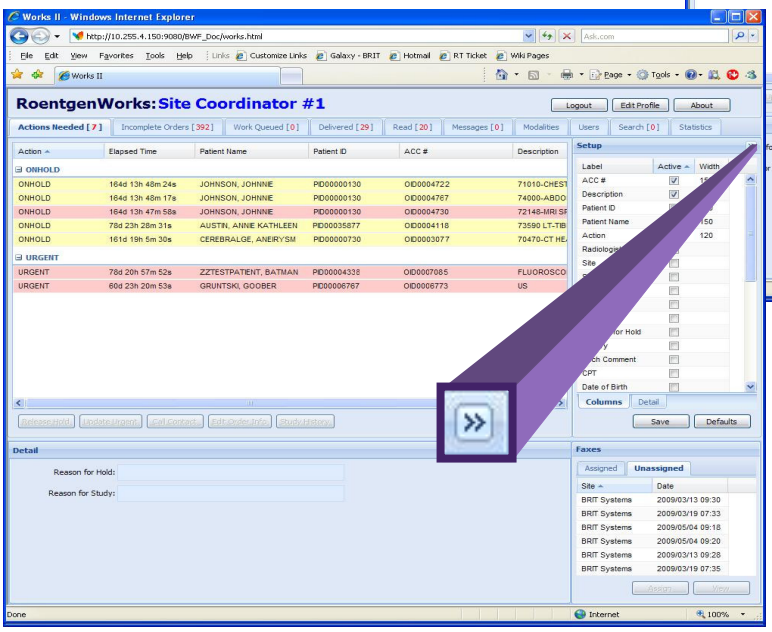
Radiologist	Priority	Patient Name	Patient ID	ACC #	Description	Date of Birth	Sex	Modality	Body Part
RSNA									
Radiologist #1	Routine	JOHNSON, JOHNNIE	PID000130	OID000476	74000-ABDOMEN; SIN...		M	CR	ABDOMEN
Radiologist #1	Routine	RAY, RICKE	PID000101	OID000445	PELVIS/ HIPS INFANT ...	2000/10/03	M	CR	FEMUR
Radiologist #1	Routine	MAMUN, MAGNOLIA	PID000039	OID000355	76095-MM DIGITAL DI...	1971/08/19	F	MG	BREAST
Radiologist #1	Routine	JOHNSON, JOHNNIE	PID000130	OID000037	Chest Erect LAT		M	CR	CHEST
Radiologist #1	Routine	VOXALUNY, VILIAN	PID000122	OID002052	CT_Lung_PE	1975/12/18	F	CT	CHEST
BRIT Systems									
Radiologist #1	Routine	MAMUN, CALIA	PID000587	OID225871	Screening-Bilateral Ma...	1954/05/28	F	PR	BREAST
Robbie	Critical	KUTHIN, KANIE	PID352142	OID000658	CT HEAD W/O	1940/07/06	F	CT	HEAD
Robbie	Routine	KUTHIN, KANIE	PID352142	OID005800	CT HEAD W/O-70450	1940/07/06	F	CT	HEAD
Radiologist #1	Routine	ZAND, ALLIE	PID000013	OID007303	CTABDC	1951/07/01	F	CT	ABDOMEN
Radiologist #1	Routine	GLANIE, JOLIE	PID007573	OID008931	71020-CHEST, 2 VIEWS	1932/12/17	F	CR	CHEST
Robbie	Critical	KUTHIN, KANIE	PID352142	OID000012	71020-CHEST, 2 VIEWS	1940/07/06	F	CR	CHEST
Robbie	Routine	KUTHIN, KANIE	PID352142	OID000035	71010-CHEST; SINGLE...	1940/07/06	F	CR	CHEST
Radiologist #1	Routine	LARGES, TRUDY	PID000008	OID000443	71260-CT CHEST W C...	2000/02/01	F	CT	ABDOMEN
Radiologist #1	Routine	KUTHIN, KANIE	PID352142	OID004110	71010-CHEST; SINGLE...	1940/07/06	F	CR	CHEST
Radiologist #1	Routine	ARTHUR, TIMETHY	PID000040	OID005320	ct chest report adden...	1922/02/06	M	SC	CHEST
Radiologist #1	Routine	USMUL, STACY	PID004052	OID000995	76604-US CHEST; PLE...	1942/03/01	O	US	CHEST

Customizing the Setup and Detail

The Setup panel allows the user to customize the columns that are shown in each tab's patient list and the Details below according to their own personal preferences.

If the Setup panel is not shown when the user logs in, there is a button at the far right side of the patient study section that allows the user to open the Setup panel.





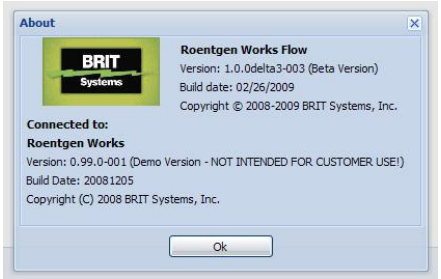
Once this button is selected, the Setup panel **opens** to the right of the Patient List, as shown above:

Once the Setup panel is open, the changes to a , which allows the user to **close** the Setup panel and maximize the Patient List.

Action and User Buttons

There are a series of Toolbar action buttons under Patient List that allow additional functions to be performed on the selected study. This provides a complete list of those buttons, their purpose, and the tab where the buttons are found.

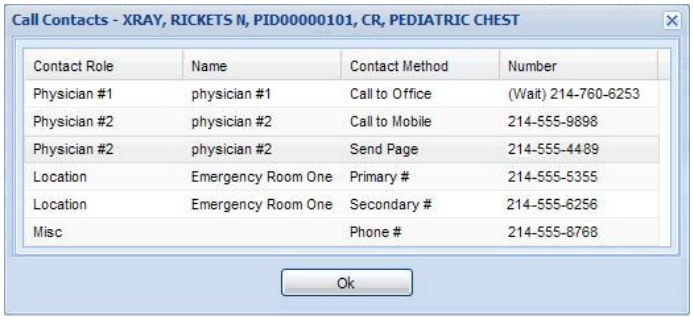
The buttons include:



- About – This is a User button that is found at the top right area in the User Status section and displays the version number, and release date of the Roentgen Works Flow application.

- Acknowledge – This Action button is found in the Messages [6] tab. It allows the Site Coordinator to send a notification that the message has been received and read.

- Call Contact – This Action button is found in the Actions Needed [7] tab, Delivered [1] tab, and Read [27] tabs, and it is used to display a list of contact information for the referring physician identified on the study. Optionally, the Site Coordinator can use Skype to contact the referring physician by automatically dialing through the workstation. Skype is a software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones.


Call Contacts - XRAY, RICKETS N, PID00000101, CR, PEDIATRIC CHEST
Contact Role | Name | Contact Method | Number
Physician #1 | physician #1 | Call to Office | (Wait) 214-760-6253
Physician #2 | physician #2 | Call to Mobile | 214-555-9898
Physician #2 | physician #2 | Send Page | 214-555-4489
Location | Emergency Room One | Primary # | 214-555-5355
Location | Emergency Room One | Secondary # | 214-555-6256
Misc | | Phone # | 214-555-8768
Ok

  When this button is selected a pop-up window opens to allow the Site Coordinator to select the referring physician who needs to be contacted regarding this patient. Double-click on the contact's phone number in the list and Skype automatically places the call.

- Complete – This button is found in the Incomplete Orders [365] section, and allows the Site Coordinator to mark the order as Complete to be returned to the Radiologist.

- Defaults – This button is found in the Setup section and allows the Site Coordinator to set the selected setting to be the default settings in all the tabs except the Incomplete Orders [365] tab.

- Delete – This Action button is found in the Messages [6] tab. It allows the Site Coordinator to remove the selected message from the screen.
- Delete Modality – This Action button is button is found in the Modalities tab. The Site Coordinator uses this to remove an existing modality permanently.
- Delete User – This Action button is found in the Users tab. It allows the Service Manager or Site Coordinator to permanently remove a user from accessing the system.
- Dismiss Study – This Action button is found in the Incomplete Orders [365] tab. It allows the Site Coordinator to delete the order.
- Download Study – This Action button is found in the Search tab. Once the Site Coordinator has found the study for the patient, this button allows them to download the selected study to the viewer.

This is not the normal way to receive studies and is typically used only when the user has very slow download speed from their ISP.

- Edit Modality – This Action button is found in the Modalities tab. The Site Coordinator uses this to modify information for an existing modality.
- Edit Order Info – This Action button is found in the Actions Needed [7] tab, Work Queued [2] tab, and the Delivered [1] tab. It allows the Site Coordinator to modify the patient's order because of missing information the Radiologist needs to complete the study's report. The Order information can be changed until it is marked as "Read".
- Edit Profile – This is a User button that is found at the top right area in the User Status and it brings up the User's Profile to allow the user to make changes to their personal information including:

  - User Name
  - Password
  - DICOM AE Title
  - DICOM Host
  - DICOM Port
  - Mobile Phone Number
  - Office Phone Number
  - Home Phone Number
  - Pager Number
  - Fax Number
  - E-mail Address
  - Site Information

- Edit User – This Action button is found in the Users tab. It allows the Site Coordinator to make changes to the user's profile.

- Forever – This Action button is found on the Search tab. It allows the user to search for a patient by all dates from the initial date the system was installed.
- Login – This User button is on the first screen that opens, which is the Login screen, and allows the user to enter into the application, based on their permissions.
- Logout – This is a User button that is found at the top right area in the User Status area, and is used to allow the Site Coordinator to log out of the system.
- Mark Comparison – This Action button is found on the Incomplete Orders [365] tab. It allows the Site Coordinator to select a study and mark it as a comparison study to send to the Radiologist to view and evaluate against the current study.
- New Location – This Action button is found in the Incomplete Orders [365] tab and the Users tab. It allows the Site Coordinator to define a new location at the hospital facility which the Reading Services Group may use for contact information. Typically this is the ER.
- New Modality – This Action button is found in the Modalities tab. This button allows the Site Coordinator to define new modalities.
- New Physician – This Action button is found in the Incomplete Orders [365] tab and the Users tab. It allows the Site Coordinator to define new referring physician at one of the imaging centers or hospital facilities.
- New Site Coordinator – This Action button is found in the Users tab. It allows the Site Coordinator to define new Site Coordinator for a hospital or imaging facility.
- Put on Hold – This Action button is found in the Delivered [1] tab and Work Queued [2] tabs. It allows the Site Coordinator to place the study in the Action Needed [1] tab because of additional information that is needed for the Radiologist to complete the report. It can be seen by the Site Coordinator as well.
- Release Hold – This Action button is found in the Action Needed [1] tab. It allows the Site Coordinator to remove the study from the Action Needed [1] queue, and place it back in the Delivered [1] area to be read and completed.

- Reply – This Action button is found in the Messages [6] tab. It allows the Site Coordinator to respond to the currently selected message.
- Save – This button is found in the Setup panel. It allows the Site Coordinator to save the changes that were made to any of their contact information, such as Mobile Phone number, Pager number, viewer type, or password.
- Send – This Action button is found in the Messages [6] tab. It allows the Site Coordinator to send a message regarding the currently selected message.
- Study History – This Action button is found in the Action Needed [1] tab, the Incomplete Orders [365] tab, the Work Queued [2] tab, the Delivered [1] tab, the Read [27] tab, and the Search tab. It allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.
- Unassign – This Action button is found in the Faxes section and allows the user to remove the fax from assignment to the specific study.
- Update Urgent – This Action button is found in the Action Needed [1] tab and allows the user to update the status on the Urgent study.
- Urgent History - This Action button is found in the Delivered [1] tab, and the Read [27] tab. It allows the Site Coordinator to view the comments and statuses of a study that has been identified as urgent.
- View – This button is found in Faxes section, and allows the Site Coordinator to pull up the fax that is associated with the study in order to view it.
- 1 Day – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past one day.
- 1 Month – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past one month.
- 1 Week – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past one week.

- 1 Year – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past one year.
- 2 Weeks – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past two weeks.
- 3 Days – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past three days.
- 3 Months – This button is found in the Search tab. It allows the Site Coordinator to perform the search for the patient for the past three months.

Color Coding

The studies are color coded as follows:

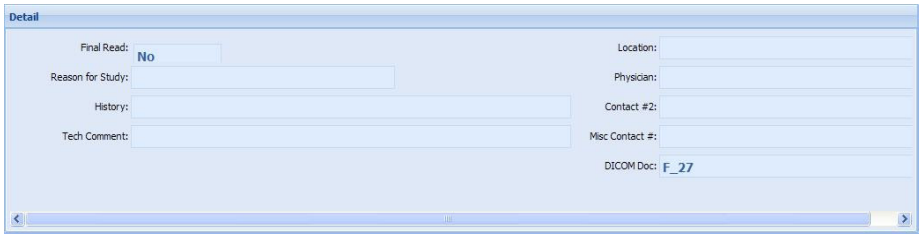
- **Pink** – Indicates that there is a **critical** study the Radiologist need to read immediately or an **urgent** finding or in which the referring physician needs to be notified immediately.

  "**Urgent**" findings are identified in pink in the Action Needed [1] tab; whereas "**Critical**" Studies are identified in pink in the Delivered [1] tab.
- **White** – Indicates that the study is designated as a **Routine** study.
- **Yellow** – Indicates that the study has been placed "**On-Hold**" due to insufficient or incomplete information, that the Radiologist has flagged, and needs to be addressed before the diagnosis can be done.
- **Blue** – Indicates that this is the **currently selected study**. If there is an interface to a Radiologist viewing workstation, such as BRIT Vision, double-clicking on one of these selected patients, automatically downloads the study to the workstation

Details

The Details panel can also be customized from the selections on the Setup panel to the right of the patient list, according to user preferences. The information is shown in this panel when the user clicks on a specific patient's study in the Patient List above, and the additional detailed information regarding the study is shown.

This Details panel can be customized. Below is a sample of a customized Details panel which provides the following information:

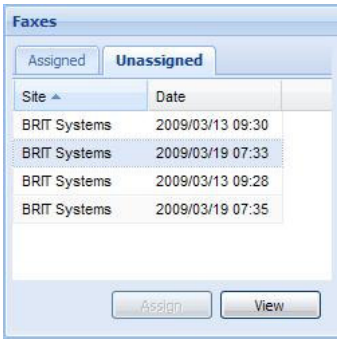


- **Final Read** Yes or No – Determines if this should be the final read for the study or not.
- **Reason for Study** – Identifies why the Referring Physician ordered the study for the patient.
- **History** – Shows a brief patient history.
- **Tech comments** – Identifies any issues that the Tech determines the Radiologist needs to know about the patient, or the study, or the condition of the patient that is pertinent to a diagnosis.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact. A location has a phone number associated with it.
- **Physician** – Identifies the Referring Physician.
- **Contact #2** – Identifies the backup contact to be used if the physician can't be reached.
- **Misc Contact #** – Provides an additional contact phone number for providing results.
- **DICOM Doc** – Refers to the referring physician's name that is reported in the DICOM header in the study, and can be different from the name in the Order.

For more information on customizing the Details panel, see the section Setting up the Details Panel.

Faxes

This section allows the user to view faxes that have been sent with the Order information, and is found in the lower right side of the window.



This contains a list of the assigned and unassigned faxes that were sent to the server.

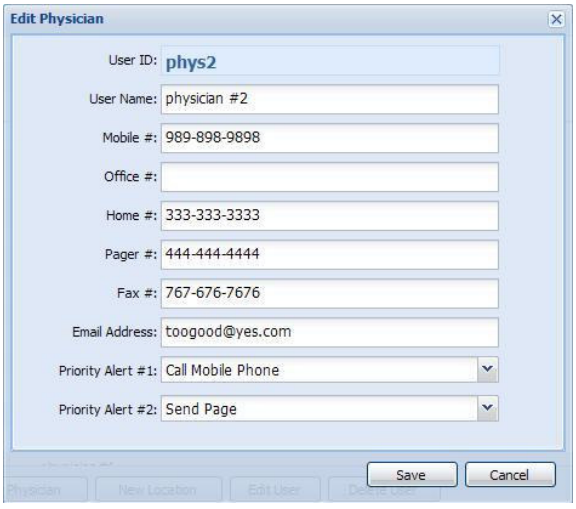
In order to look at the fax to see the information, click on the appropriate study, and click on the View button. The Fax opens in a separate window and displays the details, as shown to the left:

Click on the ✕ at the top right to close the window.

For more information in working with the faxes, see the section Chapter 14 – Viewing the Faxes.

Editing the User Profile

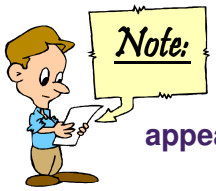
The user can change their individual information by clicking on the Edit Profile button at the top right part of the window.



The User's Profile window opens to allow the user to make changes to their personal information including:

- **User ID** – Displays the User identification that they use when they log in.
- **User Name** – Shows the user's name, this also appears on the upper left of the window to indicate the user logged in, and it is also shown on the Statistics tab.
- **Password** – This field does not show the user's Password.
- **DICOM AE Title** – This shows the Application Entity title (DICOM name of the user's computer). This allows the system to know the specific workstation on which the user is working.

- **DICOM Host** – This field shows the IP address of the workstation receiving the study.
- **DICOM Port** – This field shows the port number for the workstation receiving the study.
- **Mobile Phone Number** – This field shows the cell phone number for the user.
- **Office Phone Number** – This field shows the office telephone number for the user.
- **Home Phone Number** – This field shows the home telephone number for the user.
- **Pager Number** – This field shows the pager telephone number for the user.
- **Fax Number** – This field shows the fax number for the user.
- **E-mail Address** – This field shows the e-mail address for the user.
- **Priority Alert #1** – Identifies the preferred primary method to contact the user.
- **Priority Alert #2** – Identifies the preferred secondary method to contact the user.



Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

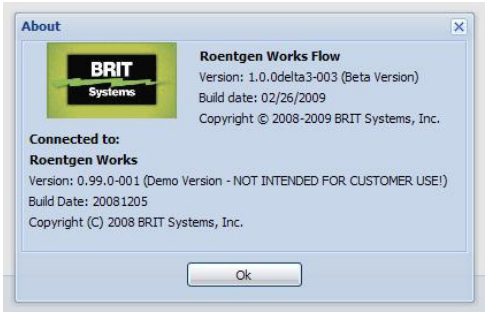
- **Site Information** – This field identifies the sites for which the user is authorized to access studies. If other sites are available that the user is not authorized, the site is not displayed in the window.

Once the information is changed, click on the Save button.

To not accept the changes, and close the pop-up window, click on the Cancel button.

Information in the "About" Window

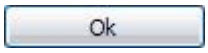
The "About" window provides the following information about the Roentgen Works Flow product:



- **Version Number**
- **Build Date**
- **Copyright date**

The “About window provides the following information about the Roentgen Works server:

- **Version Number**
- **Build Date**
- **Copyright date**

Click on the 

button to close the window.

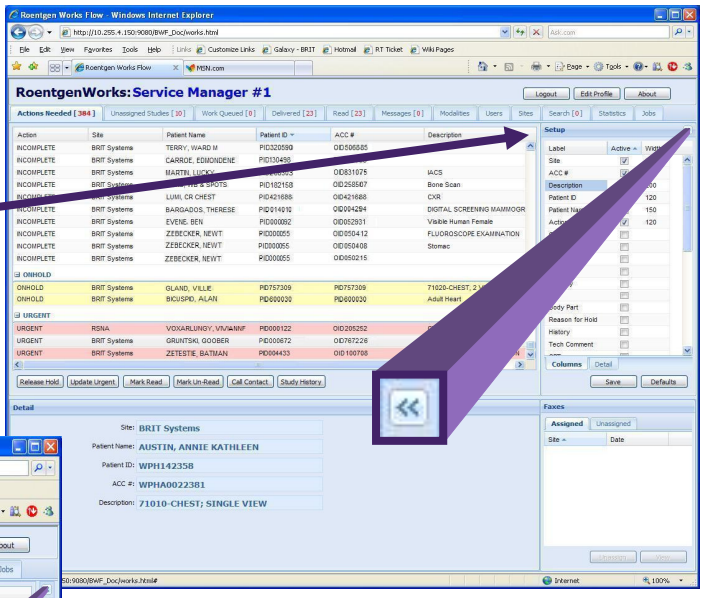
Chapter 2 – Customizing the Worklist Columns

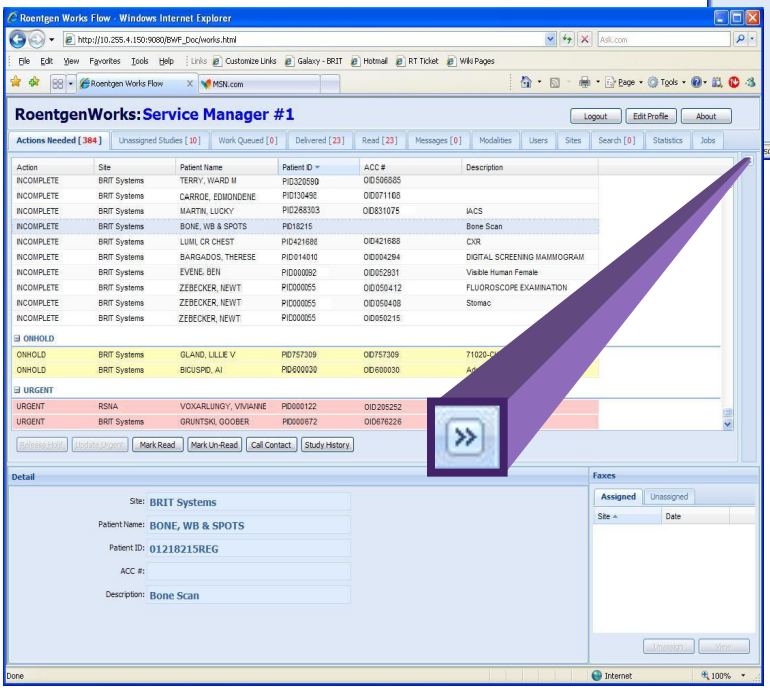
The Setup panel allows the user to customize the columns in the patient list in each of the tabs, and according to their personal preferences. Be aware each tab can have different columns details displayed and are selected on an individual basis.

Opening and Closing the Setup

The Setup panel is not normally shown when the user logs in. To open the Setup panel, there is a button at the far right side of the patient section:

Once this button is selected, the Setup panel opens to the right of the Patient List, as shown here:





Once the Setup is open, the changes to a , which allows the user to **close** the Setup panel and maximize the Patient List, as shown to the left.

Setting up the Columns

There are two tabs at the bottom of the Setup panel Columns and Detail tab. The Columns tab allows the user to customize the columns that are in each of the working tabs.

The Detail tab allows the user to customize the Details at the bottom of the patient list, and is further defined in Chapter 3 – Customizing the Details Panel.

This section shows selecting and moving of the columns and the available columns.

Selecting the Columns for the Tabs

There are a variety of columns available that the user can select to appear in the various tabs. The majority of the fields are available for every tab, but some are specific to individual tabs. Clicking on the checkbox next to the specific column allows the column to be displayed in the working tab.

In order to get the column to display on the selected working tab, the tab must be selected, and the Setup panel opened. Click on the checkbox under the Active column next the desired column, and a ✓ appears in the checkbox. As long as the ✓ appears, the column displays on the specified tab. To remove the column, click on the checkbox, and the ✓ disappears.

The Width shown displays the size of the field.

Resizing the Columns for the Tabs

The width of the column can be changed in two manners, either by manually resizing the field or by changing the value of the field in the Setup panel.

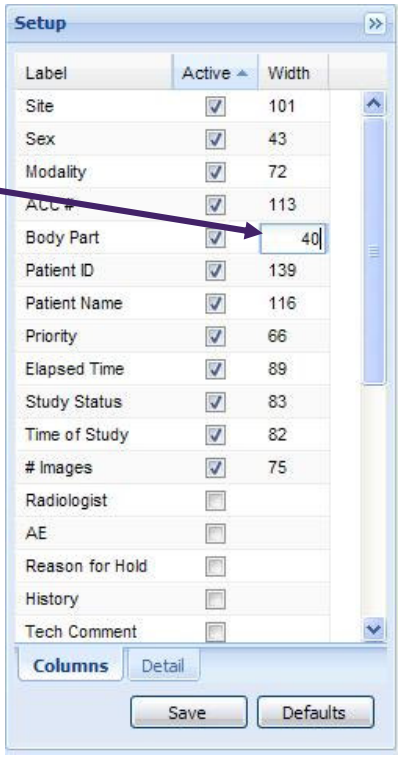
Manually Changing the Width of the Columns

The user can manually change the width of the columns by hovering the cursor over the right edge of the column heading until the cursor changes to appear as shown here:

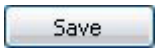
Once the double line and arrow symbol appears, hold the left mouse button down and drag it to the desired width, and release the left mouse button. The column is resized.

Changing the Width of the Columns in the Setup panel

To change the width of the column, left-click on the field to be resized, and a blue box opens around the number to allow the user to change the field. Delete the numbers in the box, and type the desired number for the size of the column.



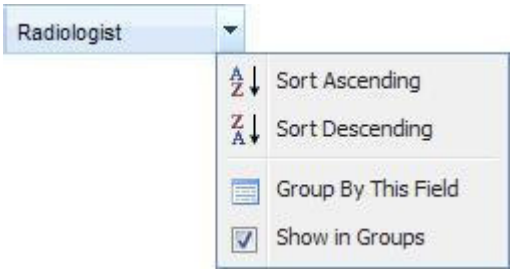
When the desired width is entered, hit the enter key on the keyboard, and the field turns blue with a small red triangle appearing at the upper left corner to indicate that the field size has changed, as shown here:

To save the changes, click on the  button.

To return the field to the original setting, click on the button.

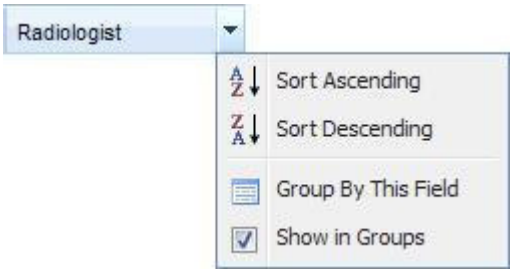
Sorting and Grouping the Columns

The column can be sorted in ascending or descending order, as well as displayed in like groups.



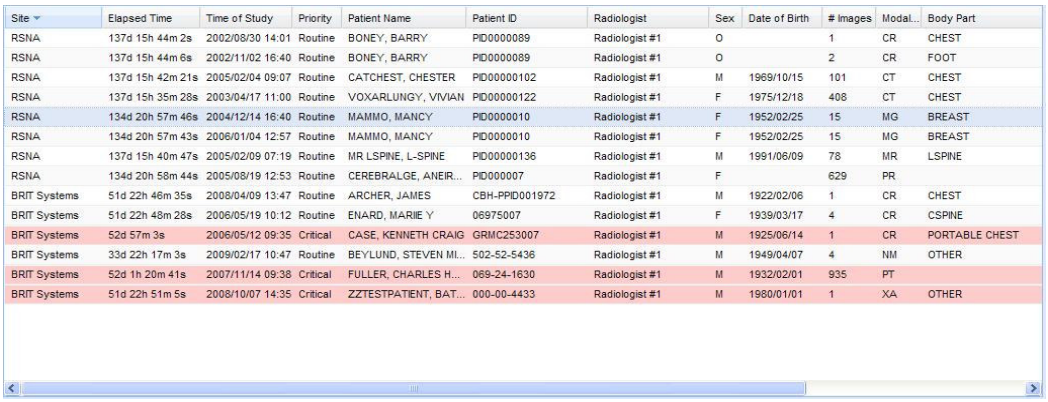
To sort the patient list by the specified columns in ascending order, click on the drop-down arrow, next to the desired column, and select **Sort Ascending**.

To sort the patient list by the specified columns in descending order, click on the drop-down arrow next to the desired column, and select **Sort Descending**.



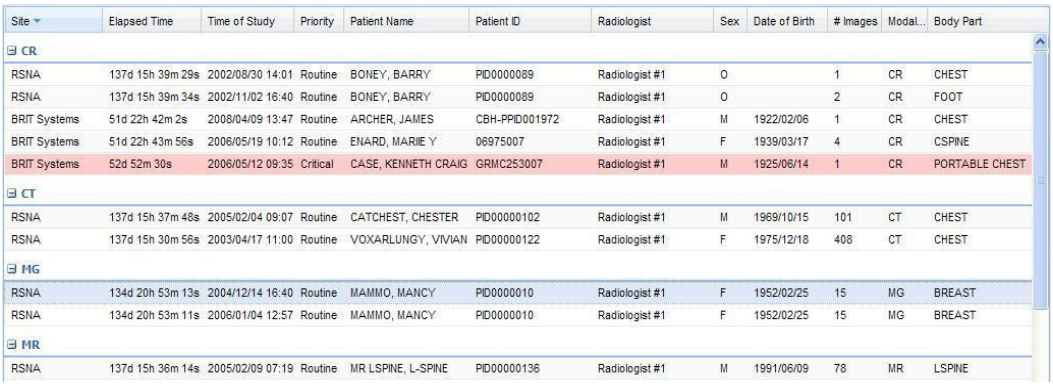
The **Group By This Field** arranges the patient list to be grouped together by the field selected. For example to get all the studies grouped together by Modality, click on the Modality header, click on the drop-down arrow, and select **Group by This Field**. The Patient list is shown as in the following samples:

The **Show in Groups** works with the **Group By This Field** so that the patient list is grouped by the selected field. In this sample the list is first sorted by the Site.



Site	Elapsed Time	Time of Study	Priority	Patient Name	Patient ID	Radiologist	Sex	Date of Birth	# Images	Modal...	Body Part
RSNA	137d 15h 44m 2s	2002/08/30 14:01	Routine	BONEY, BARRY	PID0000089	Radiologist #1	O		1	CR	CHEST
RSNA	137d 15h 44m 6s	2002/11/02 16:40	Routine	BONEY, BARRY	PID0000089	Radiologist #1	O		2	CR	FOOT
RSNA	137d 15h 42m 21s	2005/02/04 09:07	Routine	CATCHEST, CHESTER	PID00000102	Radiologist #1	M	1969/10/15	101	CT	CHEST
RSNA	137d 15h 35m 28s	2003/04/17 11:00	Routine	VOXARLUNGY, VIVIAN	PID00000122	Radiologist #1	F	1975/12/18	408	CT	CHEST
RSNA	134d 20h 57m 46s	2004/12/14 16:40	Routine	MAMMO, MANCY	PID0000010	Radiologist #1	F	1952/02/25	15	MG	BREAST
RSNA	134d 20h 57m 43s	2006/01/04 12:57	Routine	MAMMO, MANCY	PID0000010	Radiologist #1	F	1952/02/25	15	MG	BREAST
RSNA	137d 15h 40m 47s	2005/02/09 07:19	Routine	MR LSPINE, L-SPINE	PID00000136	Radiologist #1	M	1991/06/09	78	MR	LSPINE
RSNA	134d 20h 58m 44s	2005/08/19 12:53	Routine	CEREBRALGE, ANEIR...	PID000007	Radiologist #1	F		629	PR	
BRIT Systems	51d 22h 46m 35s	2008/04/09 13:47	Routine	ARCHER, JAMES	CBH-PPID001972	Radiologist #1	M	1922/02/06	1	CR	CHEST
BRIT Systems	51d 22h 48m 28s	2006/05/19 10:12	Routine	ENARD, MARIE Y	06975007	Radiologist #1	F	1939/03/17	4	CR	CSPINE
BRIT Systems	52d 57m 3s	2006/05/12 09:35	Critical	CASE, KENNETH CRAIG	GRMC253007	Radiologist #1	M	1925/06/14	1	CR	PORTABLE CHEST
BRIT Systems	33d 22h 17m 3s	2009/02/17 10:47	Routine	BEYLUND, STEVEN MI...	502-52-5436	Radiologist #1	M	1949/04/07	4	NM	OTHER
BRIT Systems	52d 1h 20m 41s	2007/11/14 09:38	Critical	FULLER, CHARLES H...	069-24-1630	Radiologist #1	M	1932/02/01	935	PT	
BRIT Systems	51d 22h 51m 5s	2008/10/07 14:35	Critical	ZZTESTPATIENT, BAT...	000-00-4433	Radiologist #1	M	1980/01/01	1	XA	OTHER

To get all the studies grouped together in each site by Modality, click on the Modality header, click on the drop-down arrow, and select **Group by This Field**. The Patient list is shown as in the sample to the right:



Site	Elapsed Time	Time of Study	Priority	Patient Name	Patient ID	Radiologist	Sex	Date of Birth	# Images	Modal...	Body Part
⊟ CR											
RSNA	137d 15h 39m 29s	2002/08/30 14:01	Routine	BONEY, BARRY	PID0000089	Radiologist #1	O		1	CR	CHEST
RSNA	137d 15h 39m 34s	2002/11/02 16:40	Routine	BONEY, BARRY	PID0000089	Radiologist #1	O		2	CR	FOOT
BRIT Systems	51d 22h 42m 2s	2008/04/09 13:47	Routine	ARCHER, JAMES	CBH-PPID001972	Radiologist #1	M	1922/02/06	1	CR	CHEST
BRIT Systems	51d 22h 43m 56s	2006/05/19 10:12	Routine	ENARD, MARIE Y	06975007	Radiologist #1	F	1939/03/17	4	CR	CSPINE
BRIT Systems	52d 52m 30s	2006/05/12 09:35	Critical	CASE, KENNETH CRAIG	GRMC253007	Radiologist #1	M	1925/06/14	1	CR	PORTABLE CHEST
⊟ CT											
RSNA	137d 15h 37m 48s	2005/02/04 09:07	Routine	CATCHEST, CHESTER	PID00000102	Radiologist #1	M	1969/10/15	101	CT	CHEST
RSNA	137d 15h 30m 56s	2003/04/17 11:00	Routine	VOXARLUNGY, VIVIAN	PID00000122	Radiologist #1	F	1975/12/18	408	CT	CHEST
⊟ MG											
RSNA	134d 20h 53m 13s	2004/12/14 16:40	Routine	MAMMO, MANCY	PID0000010	Radiologist #1	F	1952/02/25	15	MG	BREAST
RSNA	134d 20h 53m 11s	2006/01/04 12:57	Routine	MAMMO, MANCY	PID0000010	Radiologist #1	F	1952/02/25	15	MG	BREAST
⊟ MR											
RSNA	137d 15h 36m 14s	2005/02/09 07:19	Routine	MR LSPINE, L-SPINE	PID00000136	Radiologist #1	M	1991/06/09	78	MR	LSPINE

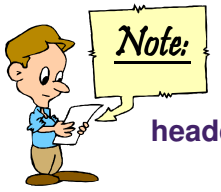
:

Moving the Columns for the Tabs

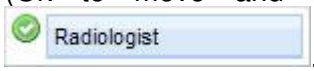
When the columns are selected they will immediately be placed into the left-most side of the window. These columns can be moved by hovering the mouse over the header, holding the left mouse button down, moving the cursor to the desired column location and releasing the mouse button.

If the header is not in the correct position for placement, the header is identified with a (stop) symbol to the left of the selected header, as shown here:

.



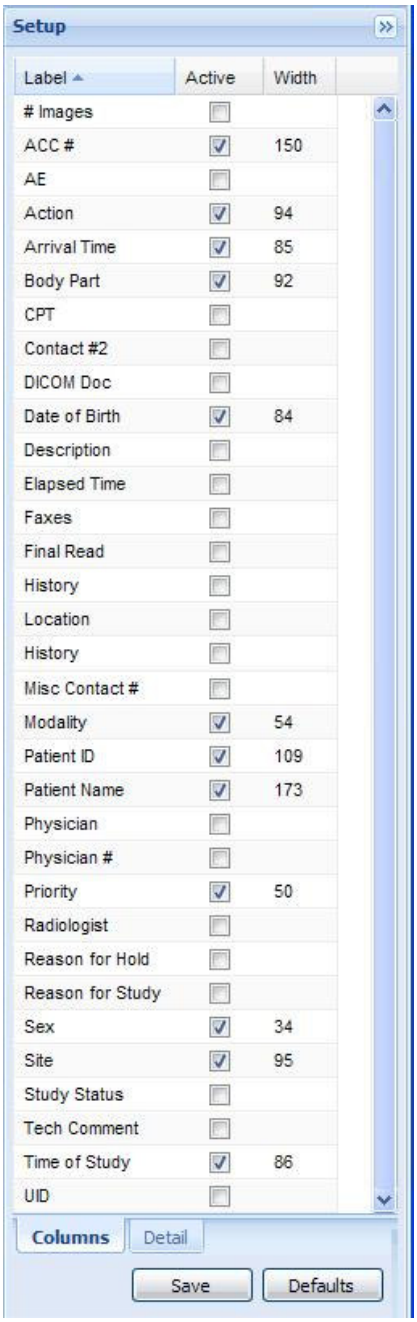
Be aware that if the header is dropped while the symbol appears, the header is not moved.

When the header is in an OK (or viable) position for placement, the header is identified with a (Ok to move and release) to the left of the selected header, as indicated here: 

. The header is then moved to the selected location.

Available Columns

Not all columns are available for every working tab, and they can only be selected when the Setup is open for that tab. Select the desired column by clicking on the corresponding checkbox in the Active column, and the ✓ appears when it is successfully selected.

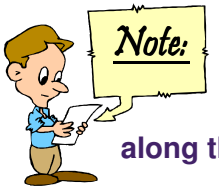


The complete list of columns that are available include:

- **# Images** – Displays the total number of images that are in the selected study. The number of images column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **ACC#** – Displays the Accession number assigned to the study. The Accession number column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **AE** – Displays the Application Entity Title for the modality on which the study was performed (if it is available). The AE Title column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.



Be aware that when connecting with some specific sites, this could be the AE Title of the PACS system because the PACS could not pass along the AE Title information for the modality itself.

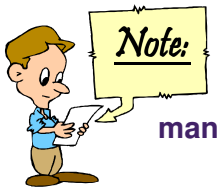
- **Action** – Displays the additional action that the Radiologist needs for the Study. This could identify the study as On Hold or Urgent. The Action column is only available in the Action Needed tab.

- **Active** – Identifies if the modality is currently integrated or not, or if the user is currently logged into the system. For example, Radiologist would show "Yes" in this column if they are logged in and accepting studies. This Active column is found in the Modalities and Users tab.

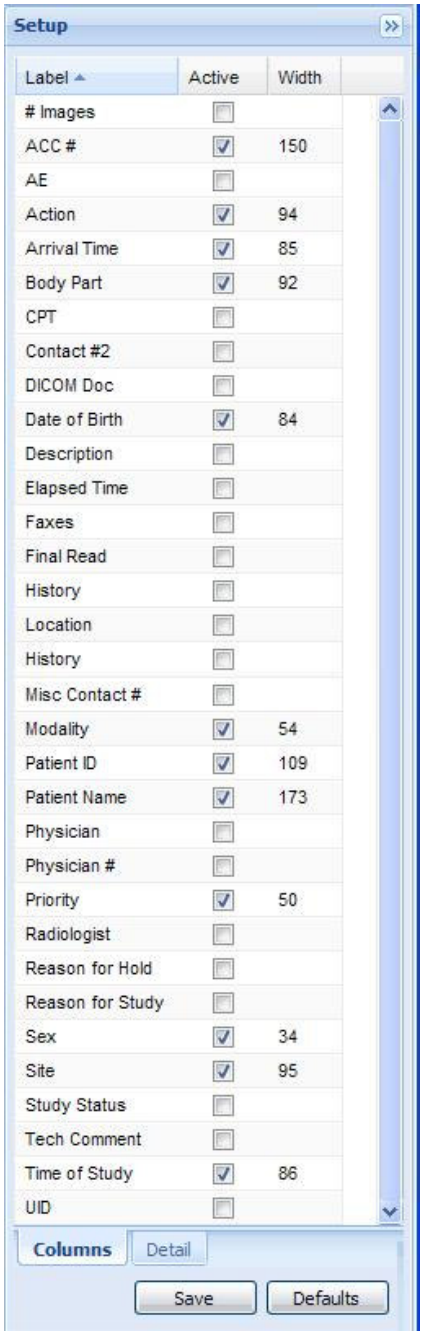
- **Arrival Time** – Displays the date and time that the study arrived at the Roentgen Works server for diagnosis. The Arrival Time column is available in the Action Needed, Delivered, and Read tabs.

- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed. The Body Part column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **CPT** – Displays the Procedure Code for the selected study. The CPT column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.



Be aware that CPT Codes are not available for worklists from the DICOM header, unless manually entered. It is available with HL-7 interfaces.



- **Category** – Identifies the message class, generated from a specific user, or a system generated message. The Category column is only available in the Message tab.

- **Code** – This is the subject of the message that was entered by the user. This Code column is found in the Messages tab.

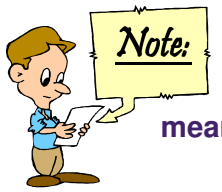
- **Contact #2** – Displays the second person to contact if the Referring Physician can not be reached. The Contact #2 column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Date of Birth** – Displays the patient's birth date. The Date of Birth column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Delivered** – Indicates the number of studies that were successfully delivered to the recipients, and is only available in the Statistics tab.

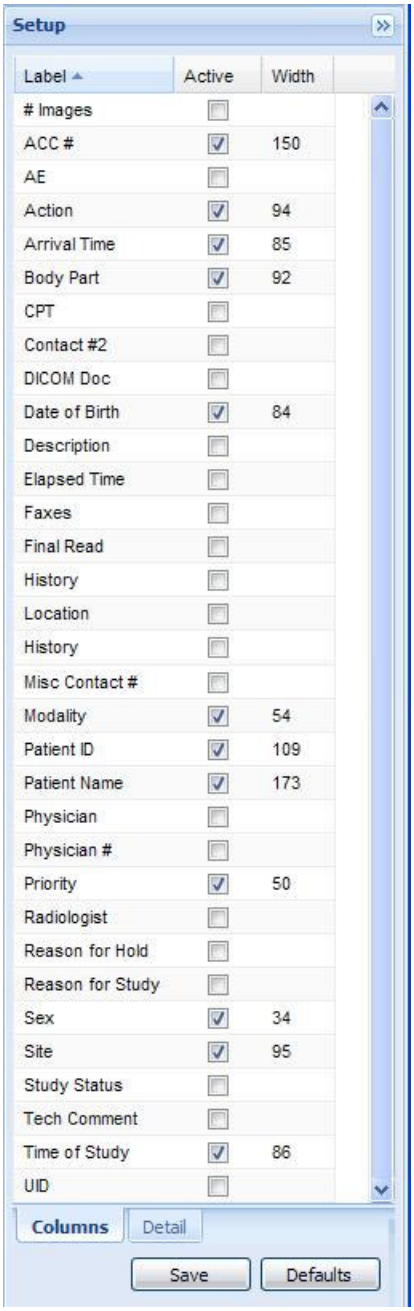
- **Description** – Displays the Study Description as stored in the DICOM header from the Modality, or the CPT code. The Description column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Description** – Displays the name of the User logged into the system for which the statistics were built. This Description column is only available in the Statistics tab.

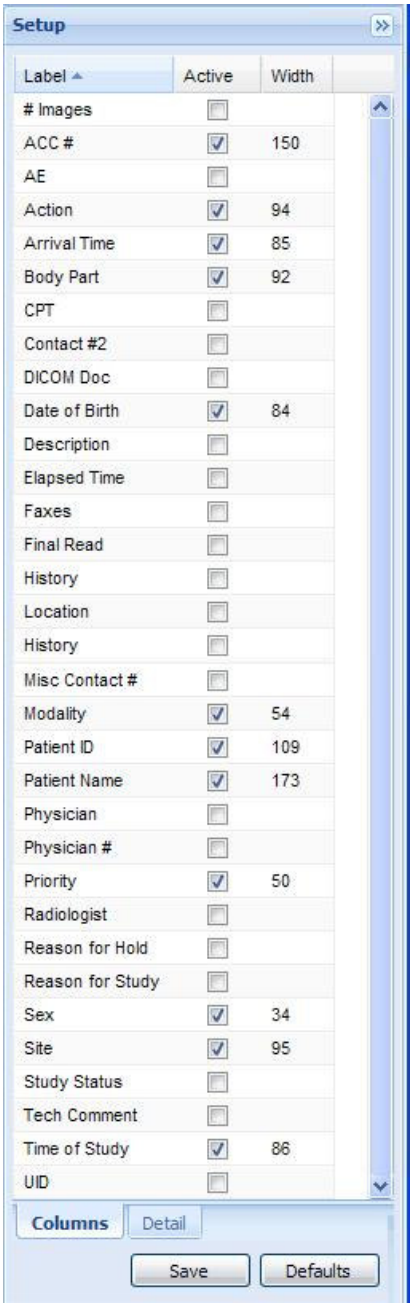


Be sure to note that there are two Description columns that have different meanings depending on the tab.

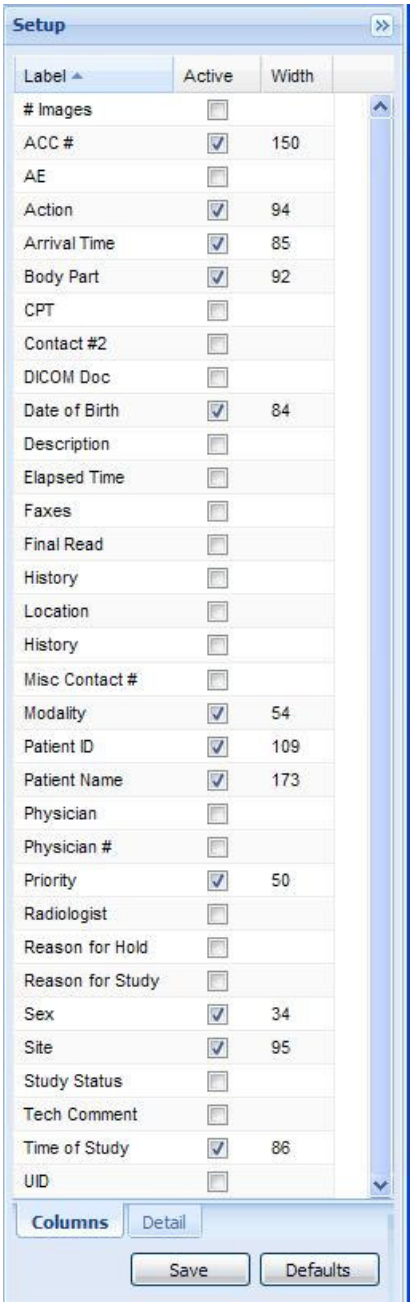
- **DICOM AE** – Displays the DICOM Application Entity title of the modality or the user. This DICOM AE Title column is available in the Modalities and Users tab.



- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study. The DICOM Doc column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **DICOM Host** – Displays the DICOM Host of the modality or to the workstation associated with the user. This DICOM Host column is available in the Modalities and Users tab.
- **DICOM Port** – Displays the DICOM Port of the modality or the workstation associated with the user. This DICOM Port column is available in the Modalities and Users tab.
- **ETA** – Displays the Estimated Time of Arrival for the study to be delivered. The ETA is available only in the Work Queued tab.
- **Elapsed Time** – Displays the amount of time in days, hours, minutes, and seconds that has elapsed since the study was delivered. The Elapsed Time column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Email Address** – Displays the e-mail address that is entered in the profile for the selected user. This e-mail address is available in the Users tab.
- **Fax #** - Displays the fax number that is entered in the profile for the selected user. This fax number column is available in the Users tab.
- **Faxes** – Identifies that a fax has been sent for the specific study from the Site Coordinator. The Faxes column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study. The Final Read column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **From** – Identifies the sender of the message, and is only found in the Message tab.
- **History** – Provides the brief patient history that was sent with the study. The History column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Home #** – Provides the home telephone number that was entered in the profile for the selected user. This home number column is available in the Users tab.



- **Incomplete** – Provides the number of incomplete studies. This Incomplete column is only available in the Statistics tab.
- **Location** – Identifies the patient location, such as the ER, that may be used as a point of contact. A location has a phone number associated with it. This column is available in the Action Needed, Incomplete Orders, Work Queue, Delivered, Read, and Search tabs.
- **Message Date** – Identifies the date the message was created and is only available in the Message tab.
- **Message Text** – Contains the complete text of the message created by the sender, and is only available in the Message tab.
- **Misc Contact #** - Displays an additional telephone or pager number for an additional contact for the referring physician. The Misc Contact # column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Mobile #** - Displays the cell phone number that was entered in the profile for the selected user. This mobile number column is available in the Users tab.
- **Modality** – Identifies the type of modality on which the study was performed. The Modality column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Office #** - Displays the office telephone number that was entered in the profile for the selected user. This office number column is available in the Users tab.
- **On-Hold** – Identifies the number of studies that the Radiologist has placed "on-hold" because further information is needed to allow them to complete the diagnosis. The On-Hold column is only available in the Statistics tab.
- **Pager #** - Displays the pager number that was entered in the profile for the selected user. This Pager number column is available in the Users tab.
- **Patient ID** – Displays the Patient's identification number from the sending site. The Patient ID column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.
- **Patient Name** – Displays the Patient Name for the study. The Patient Name column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.



- **Physician** – Displays the name of the patient's referring physician. The Physician is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Physician #** - Displays the primary telephone contact number for the patient's referring physician. The Physician # column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study. The Priority column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Queued** – Provides a summary of all the studies that are awaiting delivery to the Radiologist. The Queued column is only available in the Statistics tab.

- **Radiologist** – Displays the name of the Radiologist handling the study. The Radiologist column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Reason for Hold** – Identifies the explanation from the Radiologist for the study being placed on hold. The Reason for Hold column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient. The Reason for Study column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Sex** – Identifies the Gender of the patient. The Gender column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Site** – Identifies the facility where the patient study was captured. Depending on the Licensing agreement with the Site, this is helpful to allow the Radiologist to prioritize reading the studies. The Site column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, Modalities, Users, or Search tabs.

- **Stat Type** – Identifies if the statistics shown are for a Radiologist or are for the site. The Stat Type is only available in the Statistics tab.

- **State** – Identifies the status of the message, such as New, Acknowledged, or Deleted, or the status of a job, such as Queued, Running, Waiting, Stopping, Stopped, Done, Failed, or Deleted. This column is found in the Messages tab.

- **Status** – Identifies the status of the study according to the server's status, such as In Progress, Delivered, Dictated, Reported, Assigned (same as Delivered). This is found in the Action Needed, Work Queued, Delivered, Read, Search tabs.

- **Study Status** – Identifies the status of the study for the workflow, such as On Hold, Incomplete, Urgent, Delivered, Unread, or Read. The Study Status is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Tech Comment** – Provides the text from the Technologist that was entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam. The Tech Comment column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Time of Study** – Provides the date and time that the exam was captured at the imaging facility. The Time of Study column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **To** – Provides the name of the recipient of the message, and is only found in the Message tab.

- **UID** – Provides the Study Instance Identifier, which is the unique identifier for the study. The UID column is available in the Action Needed, Incomplete Orders, Work Queued, Delivered, Read, or Search tabs.

- **Unassigned** – Identifies the number of unassigned studies that are available, and generally only applies to the sites rather than the users. The Unassigned column is only available for the Statistics tab.

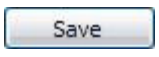
- **Urgent** – Identifies the number of studies assigned to each site and user that are tagged as Urgent by the Radiologist after their diagnosis is completed. Urgent is only available in the Statistics tab.

- **User ID** – Displays the user identification information that is assigned to the modality or the user ID for the selected user. This User ID is available in the Modalities or the Users tab.

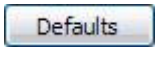
- **User Name** – Identifies the user name that is assigned to the modality or the name of the selected user. This User ID column is available in the Modalities or the Users tab.

- **User Type** – Identifies the type of user, such as a modality or the user. For the users, the type could be Site Coordinator, Radiologist, Physician, Service Manager, or Location, such as the Emergency Room. This User ID column is available in the Modalities or the Users tab.

Saving the Columns

Once all of the desired columns have been selected, click on the 

button to retain the changes.

Click on the 

button to return the settings to the original settings.

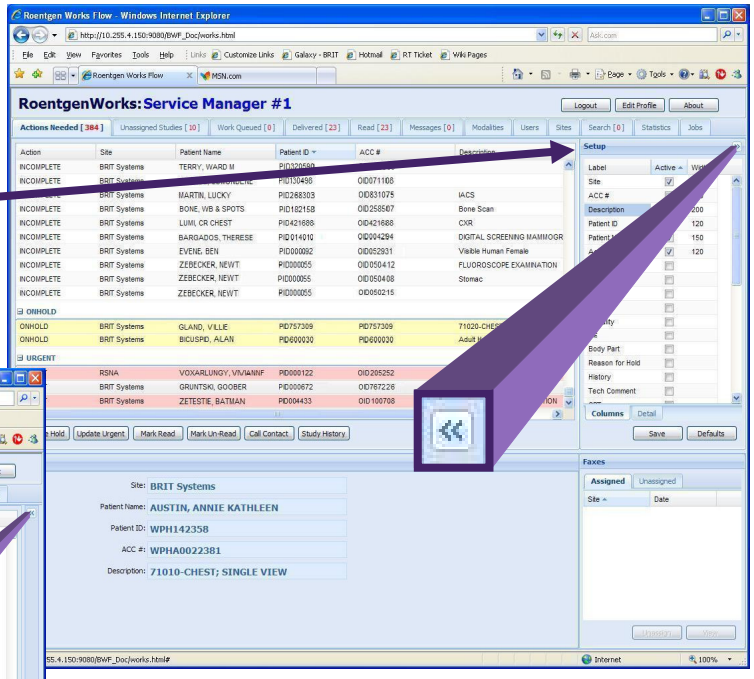
Chapter 3 – Customizing the Details Panel

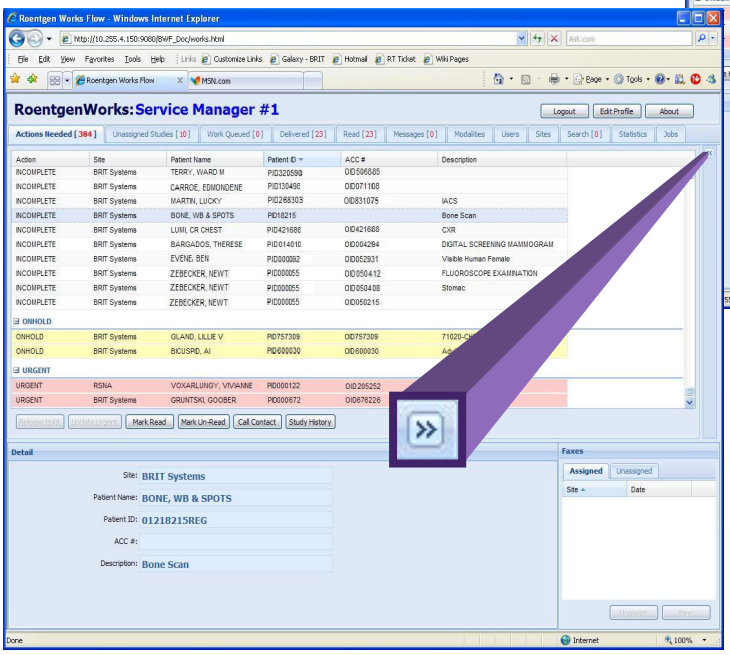
The Setup panel allows the user to customize the Details Panel at the bottom of the window under the patient list in each of the tabs, according to their personal preferences. Be aware each tab can have different details display at the bottom and are selected on an individual basis. The individual items checked in the Setup are the only fields shown at the bottom for each tab.

Opening and Closing the Setup

The Setup panel is not normally shown when the user logs in. To open the Setup panel, there is a button at the far right side of the patient section, as highlighted below:

Once this button is selected, the Setup panel opens to the right of the Patient List, as shown to the right:





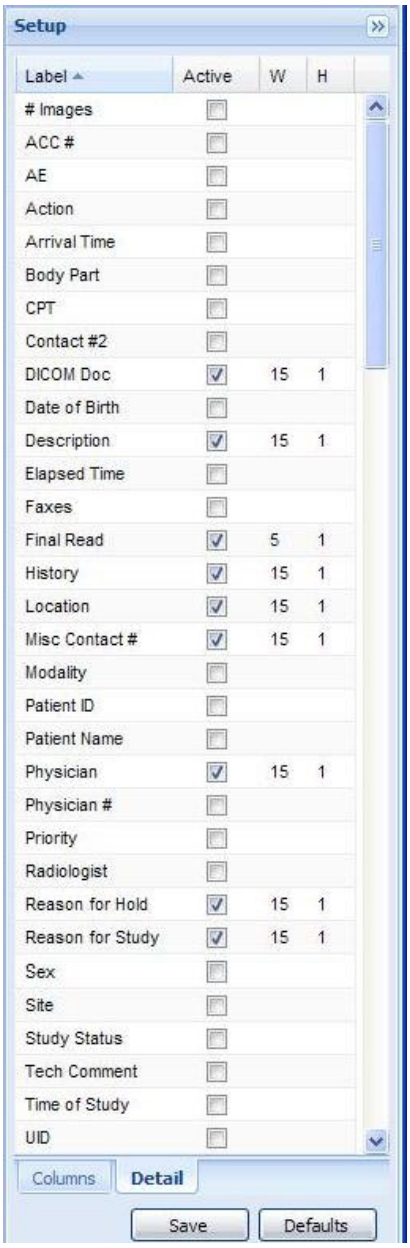
Once the Setup panel is open, the changes to a , which allows the user to **close** the Setup panel section and maximize the Patient List.

Setting up the Details Panel

The second tab at the bottom of the Setup panel is the Detail tab, which allows the user to customize the specific study information that is shown for the Details panel at the bottom. Remember that each tab can have different details display at the bottom and are selected on an individual basis.

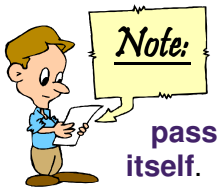
Available Detail Selections

Not all Detail selections are available for every working tab, and they can only be selected for the specific working tab when the Setup is open for that tab. The desired Detail field is selected by clicking on the checkbox, and the ✓ appears next to the column when it is successfully selected.



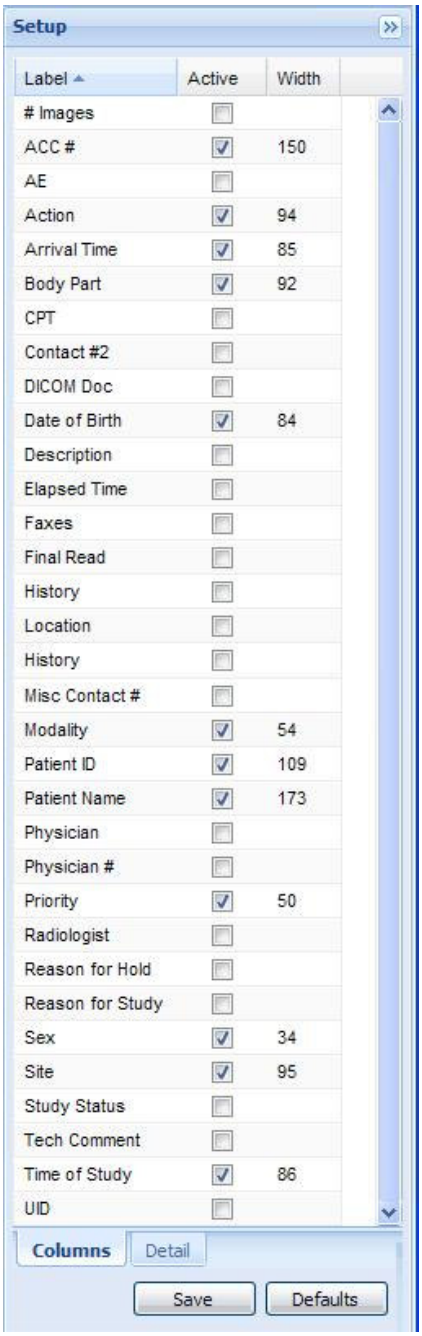
A complete list of the selections for the Detail section that is available includes:

- **# Images** – Displays the total number of images that are in the selected study. The number of images selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.
- **ACC#** – Displays the Accession number assigned to the study. The Accession number selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.
- **AE** – Displays the Application Entity Title for the modality on which the study was performed (if it is available). T he AE Title selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.



Be aware that when connecting with some specific sites, this could be the AE Title of the PACS system because the PACS could not pass along the AE Title information for the modality itself.

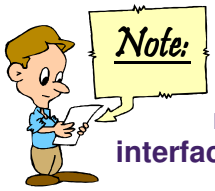
- **Action** – Displays the additional action that the Radiologist needs for the Study. This could identify the study as On Hold or Urgent. The Action selection is only available in the Action Needed tab.
- **Active** – Identifies if the modality is currently integrated or not, or if the user is currently logged into the system. For example, Radiologist would show "Yes" in the Details panel if they are logged in and accepting studies. This Active column is found in the Modalities and Users tabs.



- **Arrival Time** – Displays the date and time that the study arrived at the Roentgen Works server for diagnosis. The Arrival Time selection is available in the Action Needed, Delivered, and Read tabs.

- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed. The Body Part selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **CPT** – Displays the Procedure Code for the selected study. The CPT selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.



Be aware that CPT Codes are not available for worklists from the DICOM header, unless manually entered. It is available with HL-7 interfaces.

- **Category** – Identifies the message class, generated from a specific user, or a system generated message. The Category selection is only available in the Message tab.

- **Code** – This is the subject of the message that was entered by the user. This Code selection is found in the Messages tab.

- **Contact #2** – Displays the backup person to contact if the Referring Physician can't be reached. The Contact #2 selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Date of Birth** – Displays the patient's birth date. The Date of Birth selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Delivered** – Indicates the number of studies that were successfully delivered to the recipients, and is only available in the Statistics tab.

- **Description** – Displays the Study Description as stored in the DICOM header from the Modality, or the CPT code. The Description selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

- **Description** – Displays the name of the User logged into the system for which the statistics.

Be sure to note that there are two Description selections that have different meanings depending on the tab.

- **DICOM AE** – Displays the DICOM Application Entity title of the modality or the user. This DICOM AE Title selection is available in the Modalities and Users tab.

- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study. The DICOM Doc selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **DICOM Host** – Displays the DICOM Host of the modality or to the workstation associated with this user. This DICOM Host selection is available in the Modalities and Users tab.

- **DICOM Port** – Displays the DICOM Port of the modality or to the workstation associated with this user. This DICOM Port selection is available in the Modalities and Users tab.

- **ETA** – Displays the Estimated Time of Arrival for the study to be delivered. The ETA is available only in the Work Queued tab.

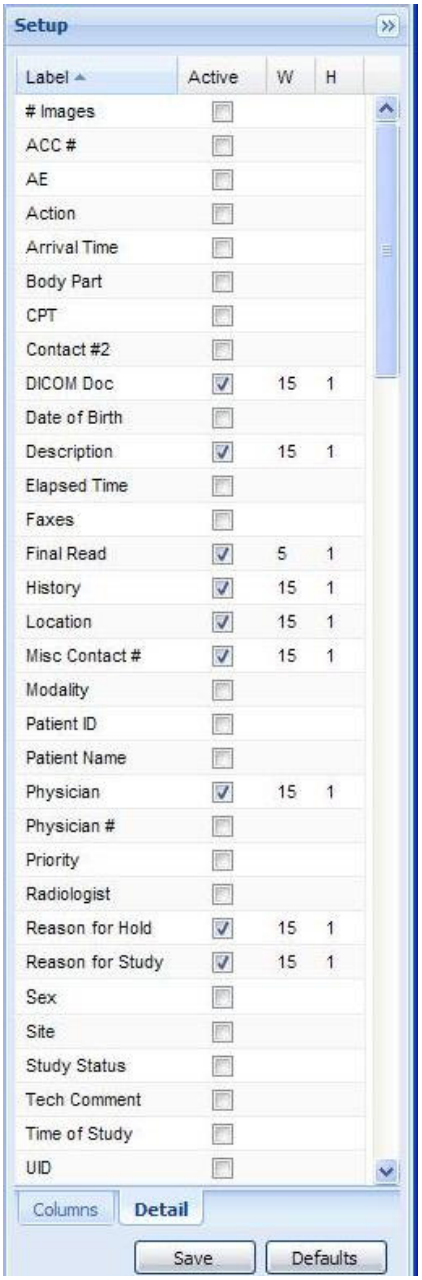
- **Elapsed Time** – Displays the amount of time in days, hours, minutes, and seconds that has elapsed since the study was delivered. The Elapsed Time selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Email Address** – Displays the e-mail address that is entered in the profile for the selected user. This e-mail address selection is available in the Users tab.

- **Fax #** - Displays the fax number that is entered in the profile for the selected user. This fax number selection is available in the Users tab.

- **Faxes** – Identifies that a fax has been sent for the specific study from the Site Coordinator. The Faxes selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study. The Final Read selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.



- **From** – Identifies the sender of the message, and is only found in the Messages tab.

- **History** – Provides the brief patient history that was sent with the study. The History selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

- **Home #** – Provides the home telephone number that was entered in the profile for the selected user. This home number selection is available in the Users tab.

- **Incomplete** – Provides the number of incomplete studies. This Incomplete selection is only available in the Statistics tab.

- **Location** – Identifies the patient location, such as the ER that is used as a point of contact. A location has a phone number associated with it. This selection is available in the Action Needed, Work Queue, Delivered, Read, and Search tabs.

- **Message Date** – Identifies the date the message was created and is only available in the Message tab.

- **Message Text** – Contains the complete text of the message created by the sender, and is only available in the Message tab.

- **Misc Contact #** – Displays an additional telephone or pager number for an additional contact for the referring physician. The Misc Contact # selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

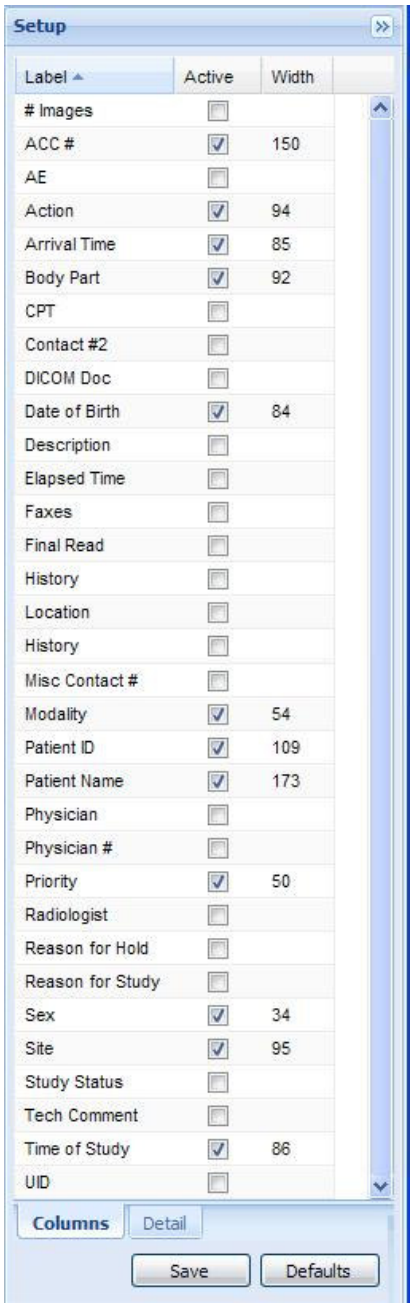
- **Mobile #** – Displays the cell phone number that was entered in the profile for the selected user. This mobile number selection is available in the Users tab.

- **Modality** – Identifies the type of modality on which the study was performed. The Modality selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Office #** - Displays the office telephone number that was entered in the profile for the selected user. This office number selection is available in the Users tab.

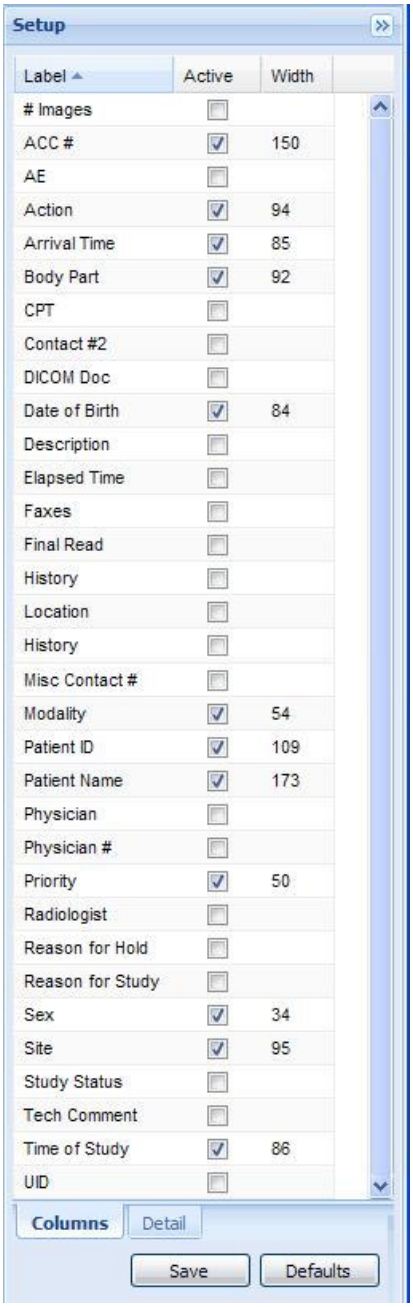
- **On-Hold** – Identifies the number of studies that the Radiologist has placed "on-hold" because further information is needed to allow them to complete the diagnosis. The On-Hold selection is only available in the Statistics tab.

- **Pager #** - Displays the pager number that was entered in the profile for the selected user. This Pager number selection is available in the Users tab.



- **Patient ID** – Displays the Patient's identification number from the sending site. The Patient ID selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Patient Name** – Displays the Patient Name for the study. The Patient Name selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.



- **Physician** – Displays the name of the patient's referring physician. The Physician selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

- **Physician #** - Displays the primary telephone contact number for the patient's referring physician. The Physician # selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study. The Priority selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Queued** – Provides a summary of all the studies that are awaiting delivery to the Radiologist. The Queued selection is only available in the Statistics tab.

- **Radiologist** – Displays the name of the Radiologist handling the study. The Radiologist selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Reason for Hold** – Identifies the explanation from the Radiologist for the study being placed on hold. The Reason for Hold selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

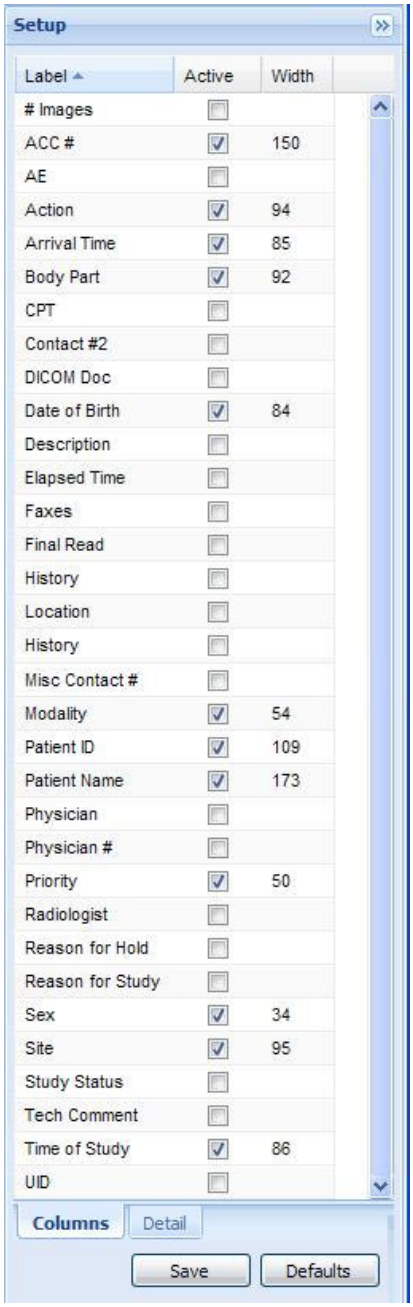
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient. The Reason for Study selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs, and is one of the default settings.

- **Sex** – Identifies the Gender of the patient. The Gender selection is available in the Action Needed, Incomplete Orders Work Queued, Delivered, Read, or Search tabs.

- **Site** – Identifies the facility where the patient study was captured. Depending on the Licensing agreement with the Site, this is helpful to allow the Radiologist to prioritize reading the studies. The Site selection is available in the Action Needed, Work Queued, Delivered, Read, Modalities, Users, or Search tabs.

- **Stat Type** – Identifies if the statistics shown are for a Radiologist or are for the site. The Stat Type is only available in the Statistics tab.

- **State** – Identifies the status of the message, such as New, Acknowledged, or Deleted, or the status of a job, such as Queued, Running, Waiting, Stopping, Stopped, Done, Failed, or Deleted. This selection is found in the Messages tab.



- **Status** – Identifies the status of the study according to the server's status, such as In Progress, Delivered, Dictated, Reported, Assigned (same as Delivered). This selection is found in the Action Needed, Work Queued, Delivered, Read, Search tabs.

- **Study Status** – Identifies the status of the study, such as On Hold, Urgent, Delivered, Unread, or Read. The Study Status is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Tech Comment** – Provides the text from the Technologist that was entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam. The Tech Comment selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Time of Study** – Provides the date and time that the exam was captured at the imaging facility. The Time of Study selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **To** – Provides the name of the recipient of the message, and is only found in the Message tab.

- **UID** – Provides the Study Instance Identifier for the study, which is the unique identifier for the study. The UID selection is available in the Action Needed, Work Queued, Delivered, Read, or Search tabs.

- **Unassigned** – Identifies the number of unassigned studies that are available, and generally only applies to the sites rather than the users. The Unassigned selection is only available for the Statistics tab.

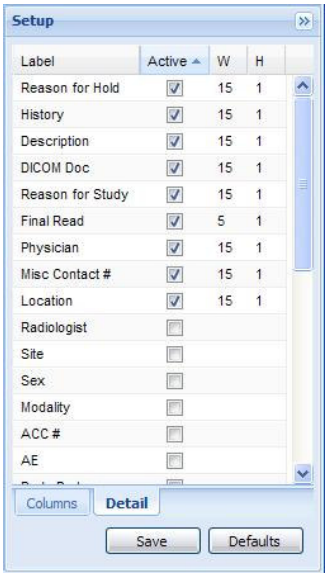
- **Urgent** – Identifies the number of studies assigned to each site and user that are tagged as Urgent by the Radiologist after their diagnosis is completed. Urgent is only available in the Statistics tab.

- **User ID** – Displays the user identification information that is assigned to the modality or the user ID for the selected user. This User ID selection is available in the Modalities or the Users tab.

- **User Name** – Identifies the user name that is assigned to the modality or the name of the selected user. This User Name selection is available in the Modalities or the Users tab.

- **User Type** – Identifies the type of user, such as a modality or the user. For the users, the type could be Site Coordinator, Radiologist, Physician, Service Manager, or Location, such as the Emergency Room. This User Type selection is available in the Modalities or the Users tab.

Changing the Width, Height, or Placement

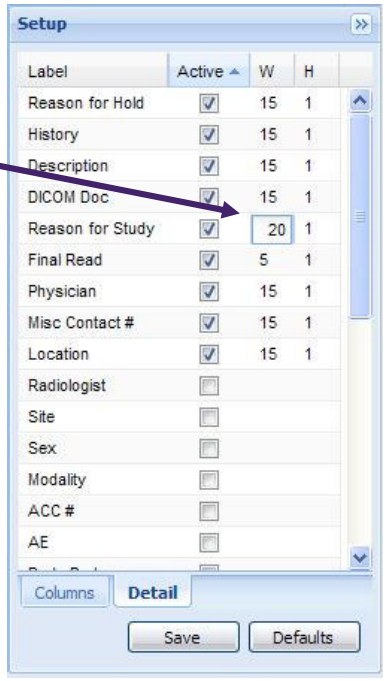


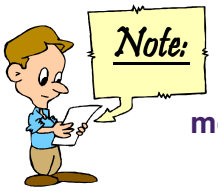
The width or height of each of these fields in the Details panel can be changed in the Setup Panel, and the placement (or location) can be changed by moving the field.

To change the height or width of the fields in the Details panel, click on the Detail tab at the bottom of the Setup panel. This shows the selected fields, and notice that the width (W) and Height (H) sizes are shown to the right of the Active checkbox, and is filled in for each of the fields that are active.

Changing the Width of a Field in the Details Panel

To change the width on any of the fields, left-click on the field to be resized, and a blue box opens around the number to allow the user to change the field. Delete the numbers in the box, and type the desired number for the size of the field.





Be aware that changing the field width may overlap a field to the right and one of them may need to be moved.

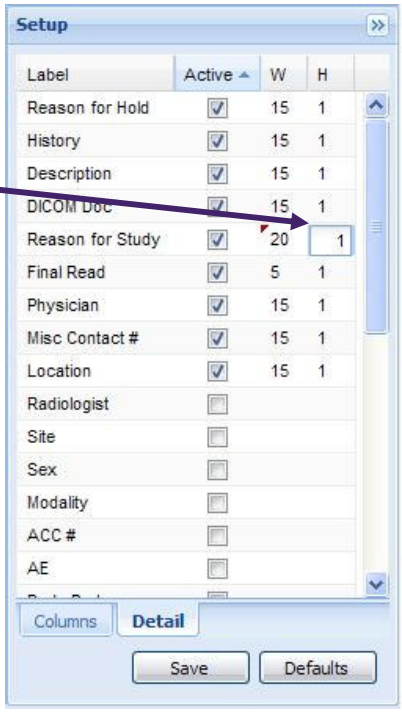
When the desired width is entered, hit the enter key on the keyboard, and the field turns blue with a small red triangle appearing at the upper left corner to indicate that the field size has changed, as shown here:

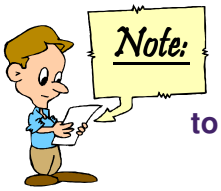
To save the changes, click on the Save button.

To return the field to the original setting, click on the Defaults button.

Changing the Height of a Field in the Details Panel

To change the height on any of the fields, left-click on the field to be resized, and a blue box opens around the number to allow the user to change the field. Delete the numbers in the box, and type the desired number for the size of the field.

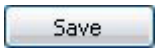




Be aware that changing the field height may overlap a field below and one of them may need to be moved.

When the desired height is entered, hit the enter key on the keyboard, and the field turns blue with a small red triangle appearing at the upper left corner to indicate that the field size has changed, as shown here:

The height of the row is one row for each increment of "1".

To save the changes, click on the  button.

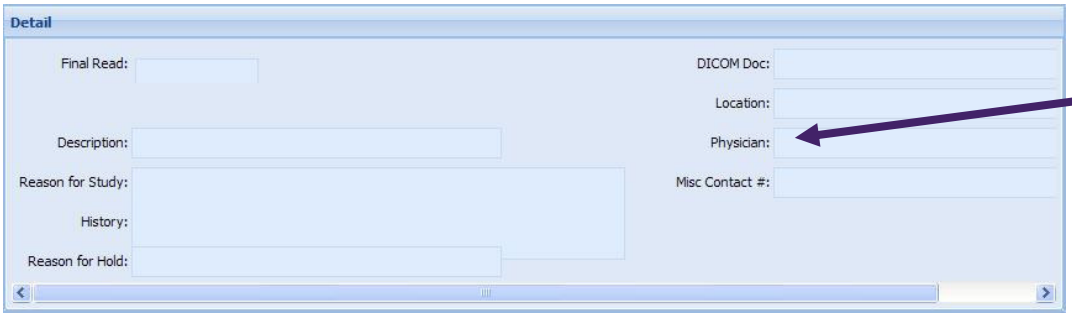
To return the field to the original setting, click on the button.

Changing the Location of a Field in the Details Panel

Occasionally the user prefers the fields in the Details panel to be in a different location in order to have the information they are seeking to be in a more convenient place. Sometimes the fields need to be moved because the width or height of another field has changed and is blocking one of the other fields in the area. This section shows how to move the various fields to a more desirable location.

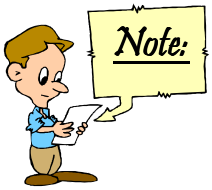
Be aware that the field can only be moved when the Setup panel is opened.

For example, the original Details panel in the Actions Needed [7] tab, looks like this:



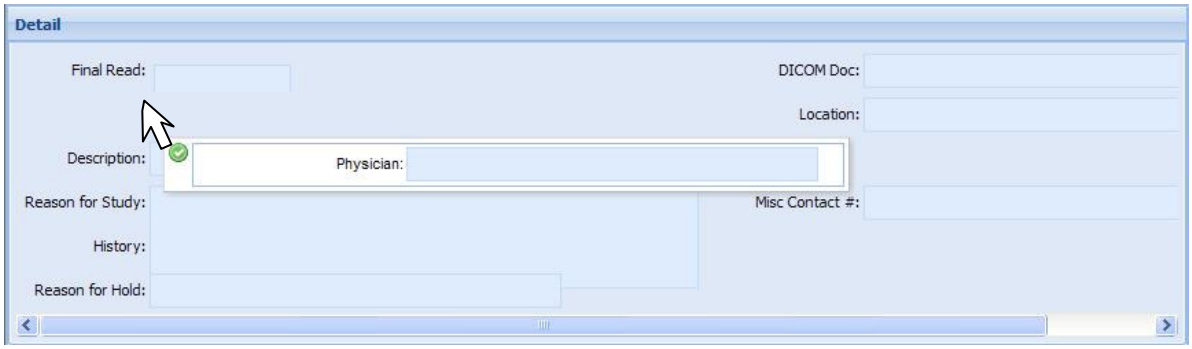
The user wants to move the Physician field so that it is directly under the Final Read field.

To move this Physician field, hold the left mouse button down on the field to be moved, drag it to the desired location, and release the left mouse button.



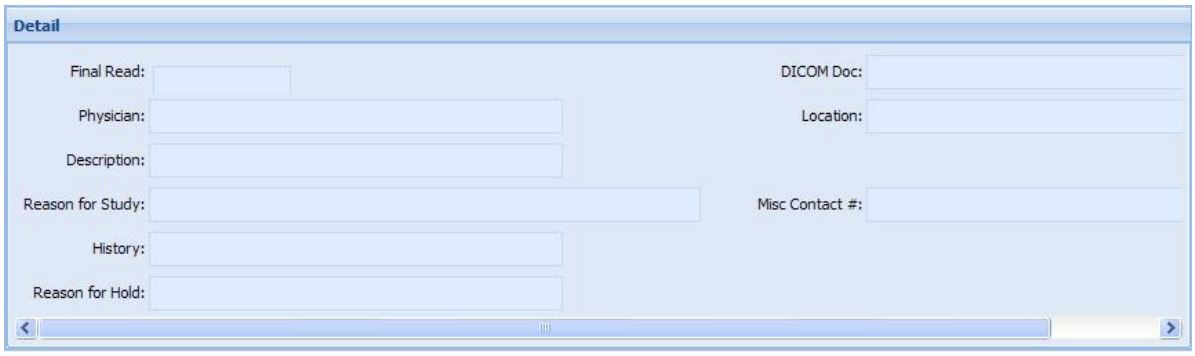
Be aware that the field will be placed where the point of the cursor is located on the window.

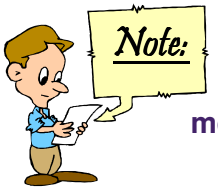
During the process of dragging the field to the desired location it appears as a floating field, as shown below:



At the upper left of the field being moved is a indicating that the field has been selected to move.

Position the pointer of the cursor at the desired location to move the field, and release the left mouse button. The field will be snapped to a location as shown below:





Be aware that moving these fields may overlap another field and several moves may be needed to reposition the fields.

Once the field is moved, it remains at that location until it is moved elsewhere.

Saving the Changes to the Details

Once all of the desired changes for the Detail selections, width, or height have been completed, click on the Save button to retain the changes.

Click on the Defaults button to return the settings to the original selections.

Chapter 4 – Actions Needed Tab

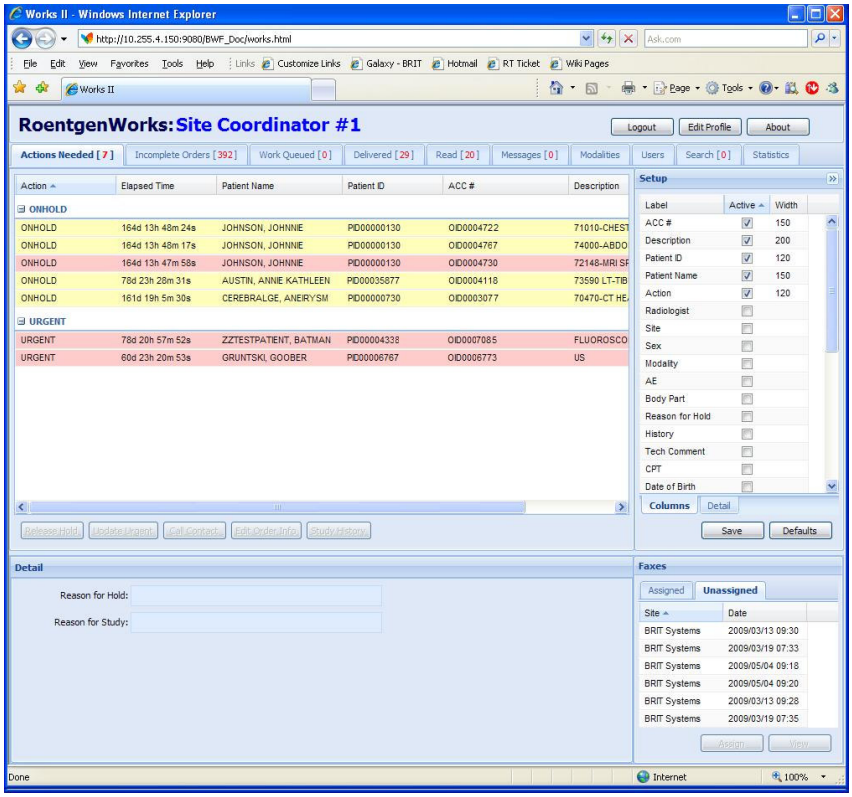
There are a variety of tasks in this window that the users work with to take further action on the various studies that appear on this Action Needed [1] window. This indicates that the referring physician needs to be contacted immediately regarding the patient in case of an urgent finding, or that some type of action needs to be taken for the Radiologist to complete the diagnosis for the patient. For example, the Radiologist may have put a study "on-hold" because the Reason for the Study was not available, and this information is needed before the Radiologist could actually complete the diagnosis for the report. Generally, the Site Coordinator provides the information and returns it.

In this tab, the actions needed could be due to "on-hold" studies, studies with "urgent findings", or "discordance" between the Radiologist and the ER physician. The Site Coordinator or Technologist can also put studies "on-hold".

This section identifies the components, uses, and features of the Action Needed [1] tab.

Components of the Action Needed Window

The following shows the Action Needed [1] window:



The number in **red** next to the tab indicates the number of studies listed in that tab. This is particularly important for this tab because it indicates the number of studies that need to handled immediately.

Generally on this page, similar types of actions are grouped together, such as studies that are placed in an "on-hold" state awaiting further detail from the Site Coordinator or the Technologist for completion of the report. This also contains studies that are in an "urgent" state due to the Radiologist observations and findings. The groups can be customized according to personal preference.

Both of these states are color coded to help alert the users to the urgent need or "on-hold" state, and these are discussed below.

Some of the user preferences can be customized, such as the columns, which can be rearranged at will, Detail information, Faxes for the specific study can be viewed, and there are several buttons available to allow the user to easily perform specific functions.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Action Needed [1] tab.

Action Buttons

There are five Action buttons available in the Action Needed [1] tab that allow the user to take specific actions for the patients in this list to resolve the issue regarding the patient and complete the study.

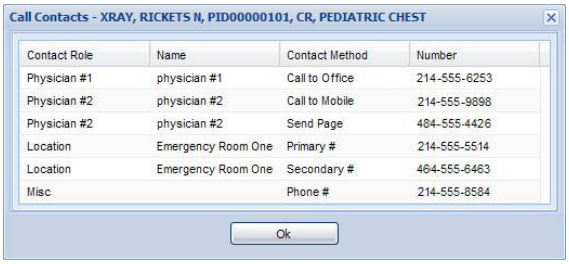
These buttons are shown below:

- Release Hold – When this Action button is selected, the study is removed from the Action Needed [1] queue, and returned to the Delivered [1] area to be read and completed by the Radiologist.

- Update Urgent – This Action button allows the user to update the status on the Urgent study. The Update Urgent pop-up window opens to allow the user to enter additional information to update the patient status.

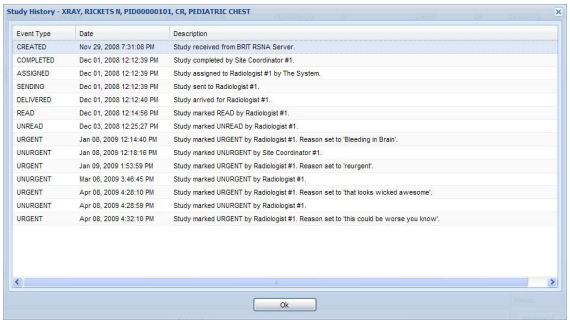
- Call Contact – This button displays a list of contact information for the referring physician identified on the study. Optionally, the Site Coordinator can use Skype to contact the referring physician by automatically dialing through the workstation. Skype is an optional software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones.

  When this button is selected a pop-up window opens to allow the Site Coordinator to select the referring physician who needs to be contacted regarding this patient. Double-click on the contact number to select the desired contact method, and place the call.



- Edit Order Info – This Action button allows the Site Coordinator to modify the patient's order because of missing information the Radiologist needs to complete the study's report.

- Study History – This Action button allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and what the status was reset to by the last user.


Study History - XRAY, RICKETS N, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

Color Coding

The studies are color coded as follows:

- **Pink** – Indicates that there is a **critical** study the Radiologist need to read immediately or an **urgent** finding in which the referring physician needs to be notified immediately.

  "**Urgent**" findings are identified in pink in the Action Needed [1] tab.

- **Yellow** – Indicates that the study has been placed "**On-Hold**" due to insufficient or incomplete information, that the Radiologist has flagged, and needs to be addressed before the diagnosis can be done, the study marked as "Read", and the Report completed.

- **Blue** – Indicates that this is the **currently selected study**. If there is an interface to a Radiologist viewing workstation, such as BRIT Vision, double-clicking on one of these selected patients, automatically downloads the study to the workstation

Selecting the Columns

The columns in the patient list can be customized according to individual preferences. There are several that have been chosen as system defaults, are set when the system is delivered, and are shown when the Columns button is selected.

There are a variety of additional columns available in the Setup panel, and these can be selected and added, or removed at any time.

The system default information shown for these studies in the Action Needed [1] tab includes:

- **ACC#** – Displays the Accession number assigned to the study.
- **Action** – Displays the additional action that the Radiologist needs for the Study.
- **Description** – Displays the Study Description as stored in the DICOM header from the Modality, or the CPT code.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name as sent from the sending site.

To change the columns selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox currently has a ✓, then the column displays on the Patient List. If the checkbox is blank, the column is no longer displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of all the available columns, see the section entitled Available Columns.

Detail Information Panel

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:

- **Reason for Hold** – Identifies the explanation from the Radiologist for the study being placed on hold.
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the details displays on the Patient List. If the checkbox currently does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the selections available for the Details section, see the list in the Available Detail Selections section.

Taking Actions in the "Action Needed" Items

There are several actions that can be taken with the studies listed in the Action Needed [1] tab which include:

- **Releasing the patient from the "On-Hold" status**
- **Updating the "Urgent Finding" status of the patient**
- **Calling the referring physician contact**
- **Editing the Study's Order**
- **Viewing the history of the study**

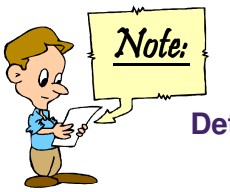
This section provides the steps to perform each of these tasks in the Action Needed [1] tab.

Releasing the Patient On-Hold

Generally, a patient has been placed "On-Hold" because further information is required before the Radiologist can complete the diagnosis. Initially, the patient was placed "On-Hold" by the Radiologist from the list of patients in the Delivered [1] tab, or the patient could also be placed "On-Hold" by the Site Coordinator.

The patient was placed in the Action Needed [1] when the Put on Hold button was selected. It remains in here to await the resolution of the issue, and will not be removed until the study is released when the information is received.

The Site Coordinator, or the Technologist, submitting the study for the patient, is notified that further information is required before the diagnosis can be completed. Generally the Service Manager is also notified of the request for additional details regarding the patient study. The Site Coordinator, Technologist, or Services Manager gathers the information, has the data delivered, and notifies the Radiologist.



Don't forget that the reason the study was put "On-Hold" can be seen in the Details section at the bottom, provided "Reason for Hold" is selected in the Details.

To release the patient from hold once the issue is resolved:

1. Click on the patient with the updated information.
2. Click on the Release Hold button.

This action removes the study from the Action Needed [1] list, and returns it to the Delivered [1] list for the Radiologist to read the study and complete the report.

Updating the Urgent Status

One of the most important actions that is performed for the patient identified with an Urgent Finding is done by updating the information for the Urgent Status. This allows additional information about the patient to be updated as the patient's condition changes.

Every activity for the patient is retained in an "Update Urgent" log, so that accurate date and times are logged as contacts are notified and actions taken and the running update history is available for the specific study.

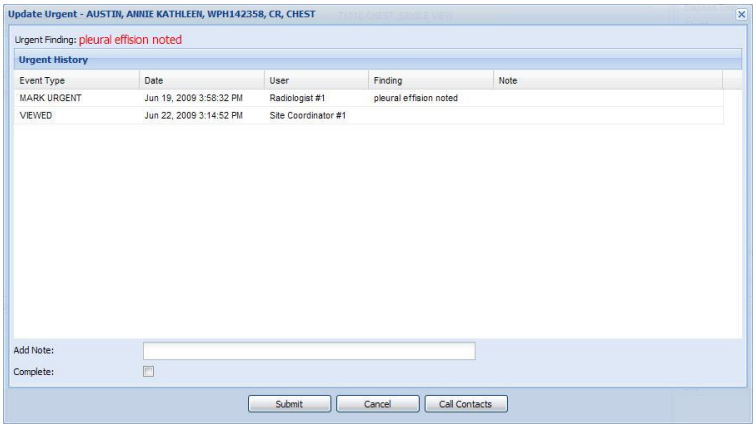
Adding Notes or Completing the Urgent Finding

The Site Coordinator can add notes to the Urgent Finding or they can mark it as complete. This section identifies how to update the Urgent finding:

To update the Urgent status:

1. Click on the Update Urgent button and the following window opens:

Notice that the latest "Urgent Finding" is shown in red at the top of the window.



2. Enter in the Notes in the "Add Note" sections.
3. Click on the Submit button to enter the update and save it for the patient's record.

Since every activity for the patient is retained in this "Update Urgent" log, accurate information is logged as contacts are notified and actions taken so that the complete update history is available for the selected study. A new entry is made for every event relating to the patient.

To complete the Urgent status:

1. Click on the Update Urgent button and the following window opens:
2. Click on the ☐ next to Complete in the Urgent Finding window.
3. The study is removed from the Action Needed [1] list.

To close the window without making changes, click on the Cancel button.

If further discussion is needed, the Call Contacts button allows the user to contact the referring physician again for additional diagnosis information.

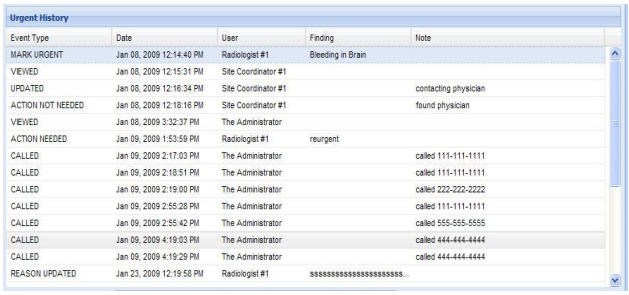
Sections of the Update Urgent Window

The Urgent Update window is comprised of **three main sections** and **three action buttons**. The sections are as follows:

Update Urgent - ALLEN, ALICIA, MPH003871, CT, HEAD
Urgent Finding: Internal bleeding, please admit to surgery as soon as possible

- **Reason Section** – This section is at the top of the window and it displays the Urgent Finding from the Radiologist.

- **History Section** – This section is the central part of the window, and it provides a complete list of the various steps, notes, calls, actions, and information that created a brief history of this specific study. It provides the following information:

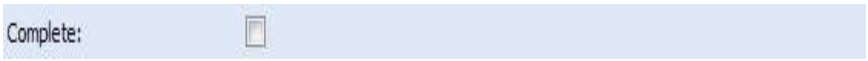

Urgent History
Event Type | Date | User | Finding | Note
MARK URGENT | Jan 08, 2009 12:14:40 PM | Radiologist #1 | Bleeding in Brain
VIEWED | Jan 08, 2009 12:15:31 PM | Site Coordinator #1
UPDATED | Jan 08, 2009 12:16:34 PM | Site Coordinator #1 | contacting physician
ACTION NOT NEEDED | Jan 08, 2009 12:18:16 PM | Site Coordinator #1 | found physician
VIEWED | Jan 08, 2009 3:32:37 PM | The Administrator
ACTION NEEDED | Jan 09, 2009 1:53:59 PM | Radiologist #1 | reurgent
CALLED | Jan 09, 2009 2:17:03 PM | The Administrator | called 111-111-1111
CALLED | Jan 09, 2009 2:18:51 PM | The Administrator | called 111-111-1111
CALLED | Jan 09, 2009 2:19:00 PM | The Administrator | called 222-222-2222
CALLED | Jan 09, 2009 2:55:28 PM | The Administrator | called 111-111-1111
CALLED | Jan 09, 2009 2:55:42 PM | The Administrator | called 555-555-5555
CALLED | Jan 09, 2009 4:19:03 PM | The Administrator | called 444-444-4444
CALLED | Jan 09, 2009 4:19:29 PM | The Administrator | called 444-444-4444
REASON UPDATED | Jan 23, 2009 12:19:58 PM | Radiologist #1 | sssssssssssssssssssss...

  - **Event Type** – Identifies such actions as Marked Urgent, Viewed, Updated, Called, Reason Updated, Action Needed, Action Unnecessary, Surgery Scheduled, or any specific relevant event type.
  - **Date and time** – Logs the specific date and time the event was issued or recorded.
  - **User** – Identifies the specific user logging the event, which could be the Radiologist who identified the patient event, the Site Coordinator trying to contact the referring physician, the Service Manager taking any required action, the Technologist, or any user who is in authorized contact on the patient and needs to update information for the patient.

- **Finding** – Provides the information alerting the staff to the problem with the patient, such as pneumothorax, hemorrhage, myocardial infarction or other critical or life threatening event in which immediate action needs to be taken.

- **Note** – Provides additional notes from the various participants in the history that are relevant, including contacting the physician, phone numbers called, and tracking and communications information that form an audit trail.

- **Add Note** – Type any additional notes in the Add Note field.

- **Complete the Action** – When the action for the Urgent finding is complete, click on the 

next to Complete and a ✓ is placed in the box.

  - The patient is removed from the

window and is moved back to the

window for the Radiologist to complete the dictation and mark the study as "Read".

  - Click on the

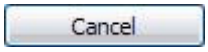
button to enter the update

Buttons on the Update Urgent Window

The Action buttons on the Update Urgent window are as follows:

-

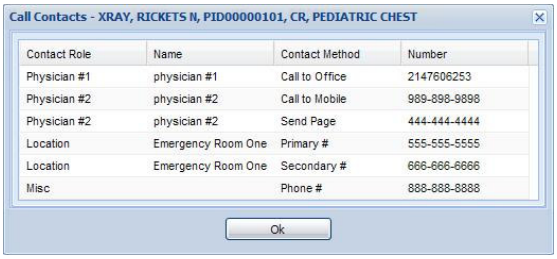
- Submits the updates that have been added for the patient, and adds it to the timeline. If the Update Urgent is marked with a ✓ next to Complete, it transfers the study from the Action Needed window to the Delivered tab for the Radiologist to complete the dictation and mark the study as "Read". If the study was already marked as "Read", it moves the study to the Read tab.

- 

- Ends the update urgent action, makes no changes, and closes the Update Urgent window.

-

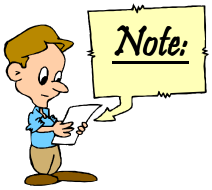
– Opens the Call contacts window to allow the user to select a contact method for the referring physician. The contact information for each Physician must be entered into the Roentgen Works system.



Notifications Using BRIT Phone

BRIT Phone is initiated automatically each time the Urgent Finding action is taken, or if additional updates are made. This application alerts the referring physician that the Radiologist has found an issue that needs immediate action for the patient. The following actions are taken by BRIT Phone when Urgent Finding is used:

- Calls the Referring Physician
- Makes an announcement requesting verification of name
- The user presses "1" to verify they are the intended recipient, or can hang up.
- If the correct recipient is identified, the announcement is made regarding the patient name, ID, and the urgent finding indicated by the Radiologist.
- The user can elect to:
    1. Press "1" to simply Acknowledge the call
    2. Press "2" to call the Radiologist who identified the urgent finding.
    3. Press "3" to call the patient Location, and alert them to the urgent finding.
- The user can then hang up.



BRIT Phone only makes calls to the Referring Physician when the Urgent status is updated, it does not place calls when the Site Coordinator adds Notes or completes the Urgent finding.

Calling the Referring Physician

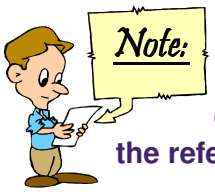
Once an Urgent Finding has been identified by the Radiologist, the referring physician must be contacted as quickly as possible to ensure expedited care for the patient. One of the optional features of this system is an automated integration with BRIT Phone or to the Skype application.

Skype is an optional software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones. It allows the user to effortlessly contact the referring physician by simply clicking on the

button, double-clicking on the desired contact's phone number, and dialing through the workstation via the Skype application.

The contact information may be automatically entered from the HL-7 message; however, this is not always available. Other methods for getting the contact information entered include:

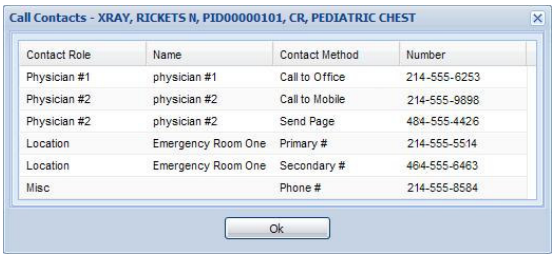
- Importing the file with the Referring Physician information
- Users with proper authority can manually enter the Referring Physician information
- Referring Physicians can maintain and update their own contact information.



The Referring Physician contact information must be entered into the Roentgen Works database in order for Skype to have a list of telephone, pager, or alternate numbers to use to contact the referring physician. Generally, the Site Coordinator at the facility is responsible for establishing the referring physician's contact information, but the users update their own profile.

To call the referring physician:

1. Make sure the correct patient study is selected.
2. Click on the Call Contact button.
3. When this button is selected a pop-up window opens to allow the Radiologist to click on the desired contact method for the referring physician.



4. Click on the desired contact number to select the number to call.
5. If Skype is being used, the system automatically dials the number, and the call is connected.

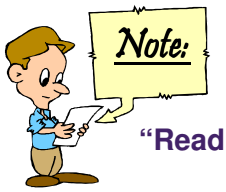
When the Ok button is selected, the Call Contacts window closes.

If the referring physician answers, the call is connected between the two parties.

If the referring physician does not answer, Skype can continue autodialing until the contact is made.

Editing the Order Information

The Order information for the Study can be edited by the Site Coordinator when changes, or updates, are needed. Editing can be done until the study has been marked as "Read".

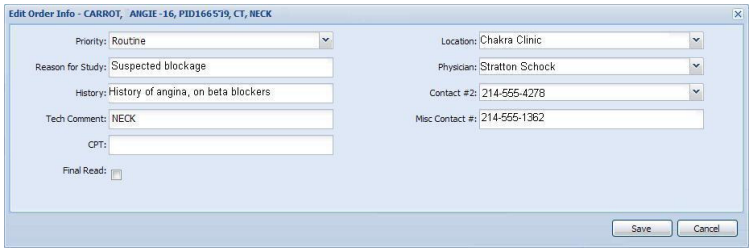


Be aware that the Order can only be edited until the study is marked as "Read".

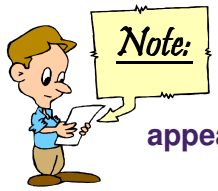
To edit the Order information, follow these steps:

1. Select the patient with the Order information that needs to be changed.

2. The Edit Order Info pop-up window opens, as shown here:



3. Click on each field to be changed and enter the correct information.



Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

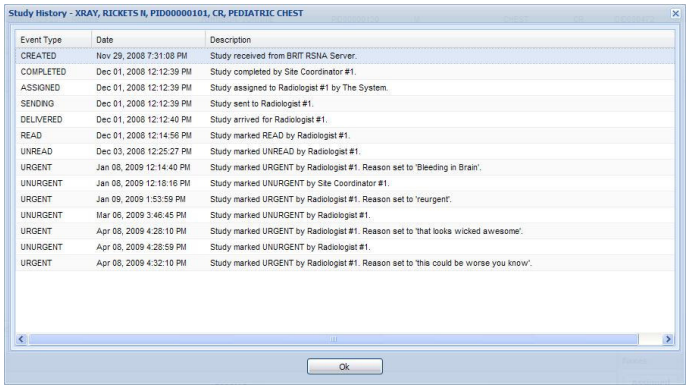
4. Click on the Save button to retain the changes made. The changes are saved and the window closes.

If the incorrect patient was selected, or the changes do not need to be made, click on the Cancel to close the window without retaining the changes.

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

To view the study history:


Study History - XRAY, RICKETS II, PID00000101, CR, PEDIATRIC CHEST
Event Type | Date | Description
CREATED | Nov 29, 2008 7:31:08 PM | Study received from BRIT RSNA Server.
COMPLETED | Dec 01, 2008 12:12:39 PM | Study completed by Site Coordinator #1.
ASSIGNED | Dec 01, 2008 12:12:39 PM | Study assigned to Radiologist #1 by The System.
SENDING | Dec 01, 2008 12:12:39 PM | Study sent to Radiologist #1.
DELIVERED | Dec 01, 2008 12:12:40 PM | Study arrived for Radiologist #1.
READ | Dec 01, 2008 12:14:56 PM | Study marked READ by Radiologist #1.
UNREAD | Dec 03, 2008 12:25:27 PM | Study marked UNREAD by Radiologist #1.
URGENT | Jan 08, 2009 12:14:40 PM | Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT | Jan 08, 2009 12:18:16 PM | Study marked UNURGENT by Site Coordinator #1.
URGENT | Jan 09, 2009 1:53:59 PM | Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT | Mar 06, 2009 3:46:45 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:28:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT | Apr 08, 2009 4:28:59 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:32:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

1. Make sure the correct patient study is selected.

2. Click on the Study History button.

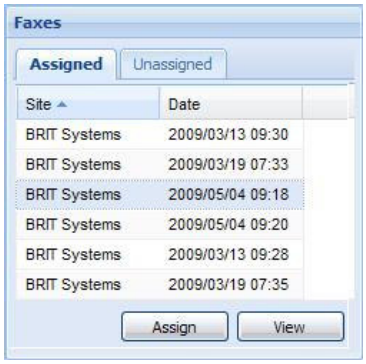
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:

   - When the study was **created**
   - When the study was **completed by the Site Coordinator**
   - When the study was **assigned**
   - When the study was **sent**
   - When the study was **delivered**
   - When the study was **read**
   - When the study was **marked urgent**
   - When they study was **put "on-hold"**

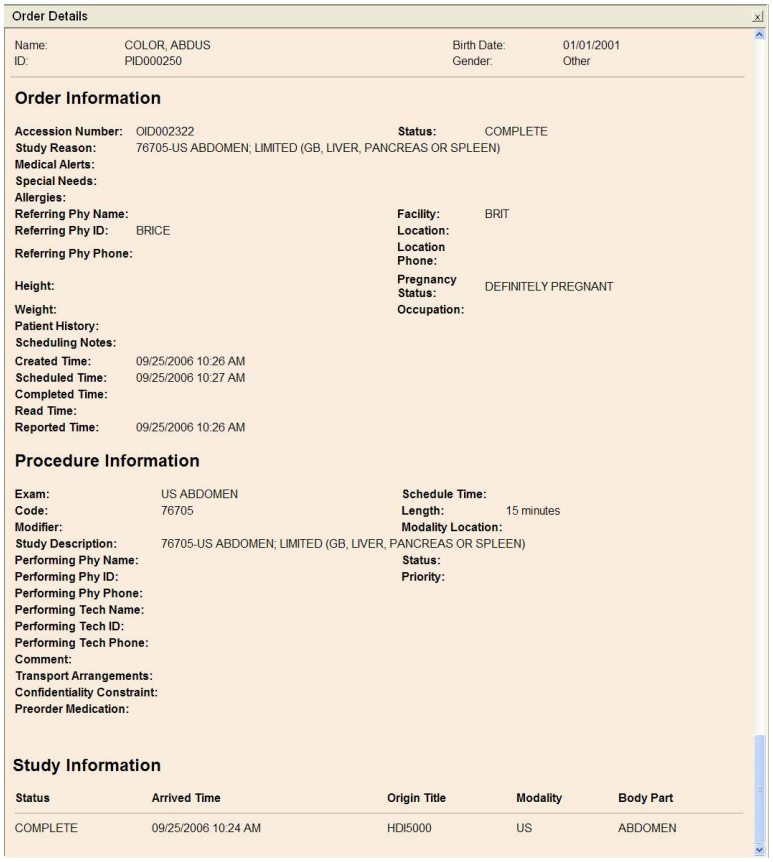
4. When the desired information is received, click on the Ok button to close the window.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.



In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the desired information is read by the user, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

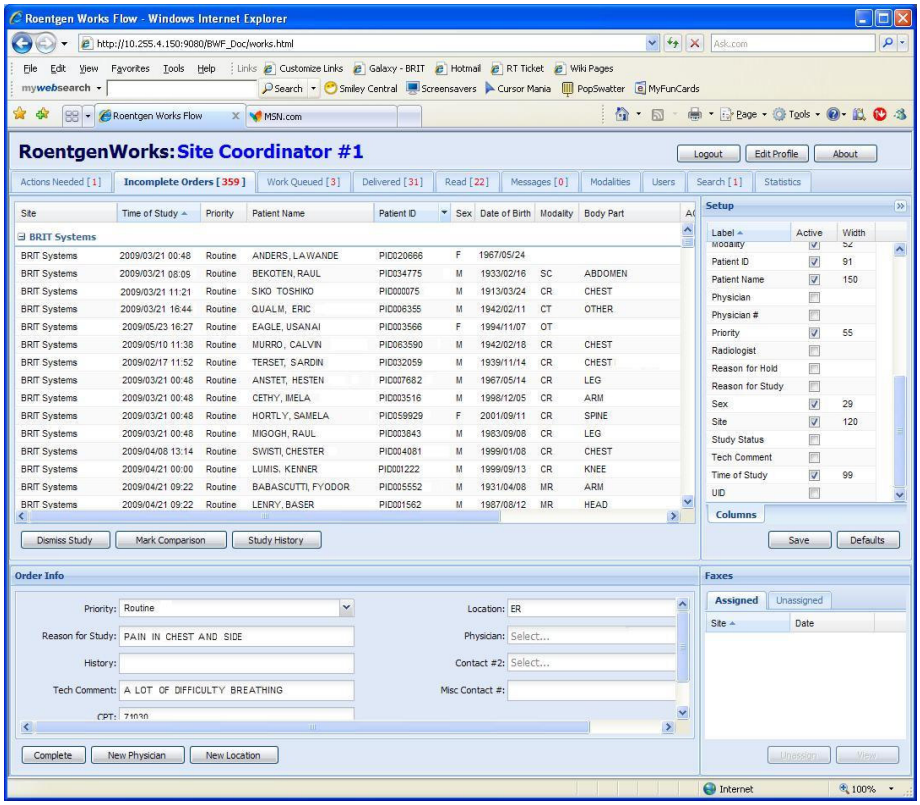
1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

Chapter 5 – Incomplete Orders Tab

The Incomplete Orders [365] tab contains the studies that have not been completed due to missing information. The Site Coordinator can then complete the missing information and transmit the study, dismiss the order, or mark it for a comparison to another study.

Components of the Incomplete Orders Window

The Incomplete Orders [365] tab window is shown below:



The number in **red** next to the tab indicates the number of studies listed in that tab.

When the orders are not complete for the studies due to missing information, or the study needs to be marked as a comparison study; these can all be handled in the Incomplete Orders [365] tab.

Depending on the site's workflow, the Site Coordinator always needs to complete the studies, or in others they will only provide information that is missing when it is requested.

This section provides information about the studies that are found in the Incomplete Orders [365] tab.

Action Buttons

There are six Action buttons in the Incomplete Orders [365] tab:

- Complete – This button allows the Site Coordinator to mark the Order as Complete. The study is then sent to the "Work Queued" tab unless a Radiologist is accepting studies, then it is sent to the "Delivered" tab for the Radiologist to view
- Dismiss Study – This Action button allows the Site Coordinator to delete the order.
- Mark Comparison – This Action allows the Site Coordinator to select a study and mark it as a comparison study to send to the Radiologist to view and evaluate against the current study.
- New Location – This Action button allows the Site Coordinator to define a new location at the hospital facility for which the Reading Services Group will contact regarding urgent or critical studies. Typically this is the ER. Existing locations can be modified in the Users tab.
- New Physician – This Action button allows the Site Coordinator to define new referring physician at one of the imaging centers or hospital facilities. Existing physicians can be modified in the Users tab.
- Study History – This button allows the Site Coordinator to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and what the status was reset to by the last user.

Color Coding

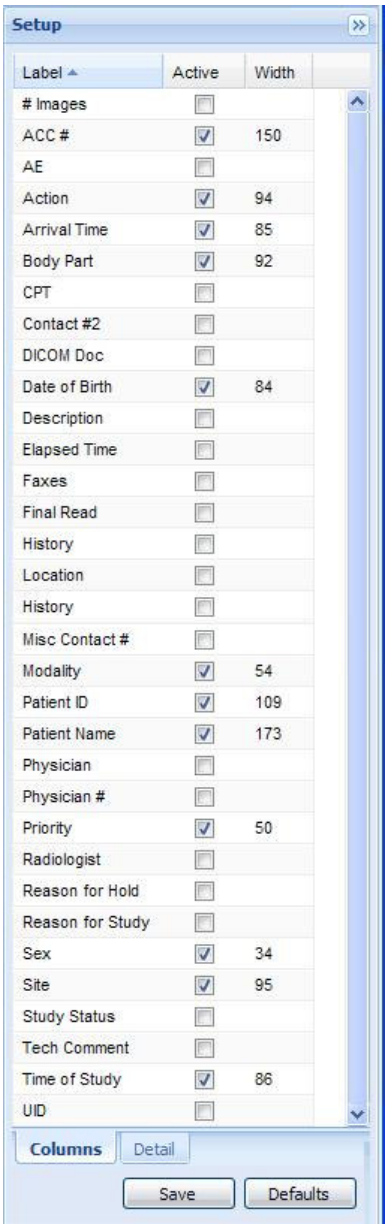
The studies shown in the Incomplete Orders [365] tab are color coded as follows:

- White – Indicates that the study is a **Routine** study, and is not identified as critical.
- Blue – Indicates that this is the **currently selected study**.

Selecting the Columns

The columns for the Incomplete Orders [365] tab list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

There are a variety of additional columns available in the Setup panel, and these can be selected and added, or removed at any time.



The system default information shown for these studies in the Incomplete Orders [365] tab includes:

- **# Images** – Displays the total number of images in the study.
- **ACC#** – Displays the Accession number assigned to the study.
- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed.
- **Date of Birth** – Displays the patient's birth date.
- **Description** – Displays the Study Description as entered either from the modality or from the order.
- **Modality** – Identifies the type of modality on which the study was performed.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name.
- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study.
- **Sex** – Identifies the Gender of the patient.
- **Site** – Identifies the facility where the patient study was captured.
- **Time of Study** – Provides the date and time that the exam was captured at the imaging facility.

To change the columns, open the Setup panel by clicking on the « to the right, and clicking on the checkbox next to the desired heading. If the checkbox currently has a ✓, then the column displays on the Patient List. If the checkbox is blank, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of all the available columns, see the section entitled Available Columns.

Order Information

The Order Info panel at the bottom of the

tab allows the Site Coordinator to enter the information that is missing in the Order.

Once the missing information is entered, they can complete the Order from here and the study moves on to the next step in the workflow.

This Order Info panel can not be customized in the Setup panel according to individual preference. There default fields includes:

- **Priority** – Indicates if the study is routine or critical indicating the importance of the study.
- **Reason for Study**– Indicates the reason that the referring physician ordered the study.
- **History** – Provides the brief patient history that was sent with the study.
- **Tech Comment** – Provides the text from the Technologist that was entered when the study was captured. This alerts the Site Coordinator to additional information that the Technologist contributed to the patient's exam.
- **CPT** – Displays the Procedure Code for the selected study.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact.
- **Physician** – Displays the name of the patient's referring physician.
- **Contact #2** – Identifies the backup contact to be used if the physician can't be reached.
- **Misc Contact #** – Displays an additional telephone or pager number for an additional contact for the referring physician.

Note that even though the information on the order is incomplete, the study may have already been sent to the workstation; however, it won't be placed in the Delivered queue until it is complete.

Taking Action in the "Incomplete Orders" Window

There are six actions that can be taken with the patients listed in the Incomplete Orders [365] list

- **Dismissing the study**
- **Marking the Study as a Comparison Study**
- **Viewing the Study History**
- **Marking the Order as "Complete"**
- **Adding a New Location**
- **Adding a New Physician**

Dismissing the Study

This Action button allows the Site Coordinator to delete the order. This may need to be deleted because the site does not want the Radiologist to read the study.

To dismiss the study, follow these steps:

1. Select the patient's study.
2. Click on the Dismiss Study button.
3. The study is removed from the list.

Be aware that the study is not actually deleted, it is flagged for dismissal, but is not removed from the system. Also currently, there is no confirmation to verify that the correct study is selected.

Marking the Study as a Comparison Study

This Action allows the Site Coordinator to select a study and mark it as a comparison study. This allows the study to be sent to the Radiologist for viewing and evaluation against the current study to see improvement or deterioration in the patient's condition.

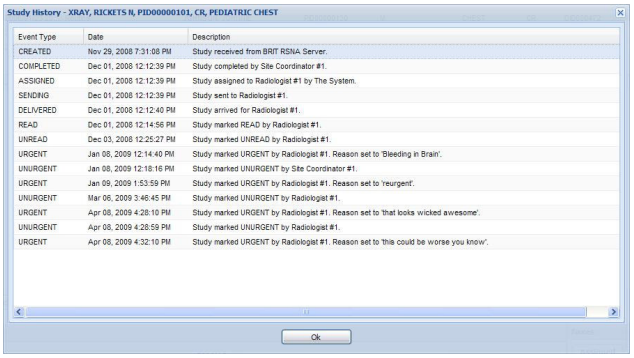
To mark the study as a comparison study, follow these steps:

1. Select the patient's study.
2. Click on the Mark Comparison button.
3. The study is flagged as a comparison study for the Radiologist.
4. The study is then moved to the appropriate queue.

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

To view the study history:


Study History - XRAY, RICKETS II, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'feurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

1. Make sure the correct patient study is selected.
2. Click on the Study History button.
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:
   - When the study was **created**
   - When the study was **completed by the Site Coordinator**
   - When the study was **assigned**
   - When the study was **sent**
   - When the study was **delivered**
   - When the study was **read**
   - When the study was **marked urgent**
   - When they study was **put "on-hold"**
4. When the desired information is received, click on the Ok button to close the window.

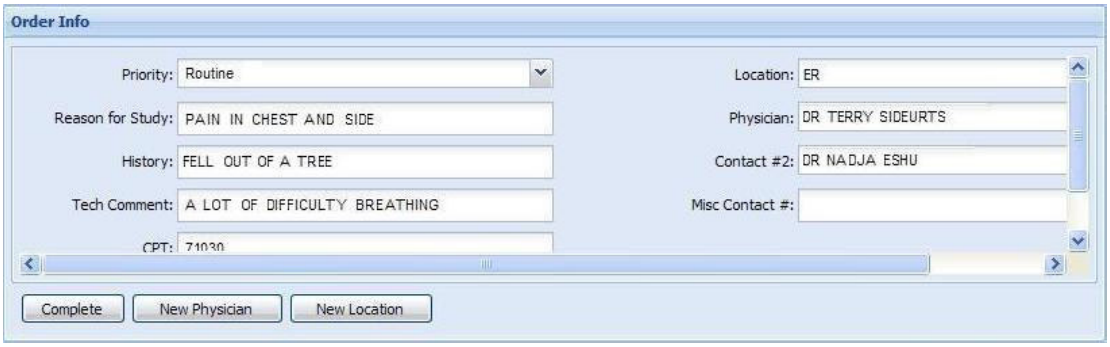
Marking the Order as "Complete"

Before the Site Coordinator can mark the order as "Complete", the missing information needs to be entered. This entry is done in the Order Info panel below the study list section.

In this example the Physician and secondary contact information are missing. .

To mark the Order as "Complete":

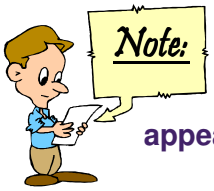
1. Enter the missing information by typing in the information or selecting from the drop-down menu.



2. Once the information is entered or selected, click on the

button.

3. The Order is then sent to the Work Queue to await delivery to a Radiologist. It may quickly go to the Delivered queue if a Radiologist is logged in and accepting studies.

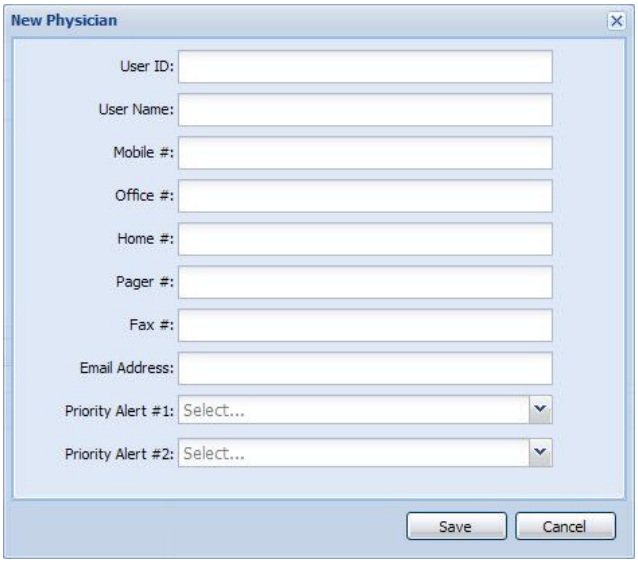


Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

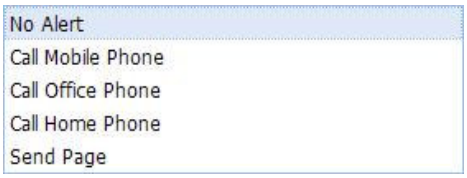
Adding a Physician

One of the actions that can be taken here is the ability to add a new Physician, who was not on the current list, but is responsible for patient care. This is helpful in that the Site Coordinator can simply click on the New Physician button without having to select the Users tab and add the user and then have to return to the Incomplete Orders [365] tab.

To add a new Physician, follow these steps:



1. Click on the New Physician button.
2. The Physician window opens, as shown here:
3. Fill out each of the fields with the information to define the new Physician. These fields include:
   a. **User ID** - This is the identification that the user enters to log into the system.
   b. **User Name** – This is the name of the user.
   c. **Mobile #** – This is the cell phone number for the new user.
   d. **Office #** – This is the office telephone number for the new user.
   e. **Home #** – This is the home telephone number for the new user.
   f. **Pager #** – This is the pager number for the new user.
   g. **Fax #** – This is the fax number for the new user.
   h. **E-mail Address** – This is the e-mail address for the new user.
   i. **Priority Alert #1** – This allows the physician to select the primary alert method to be used when they need to be contacted regarding an urgent finding or critical study for one of their patients. Click on the arrow next to the field and select the desired method. The choices are:



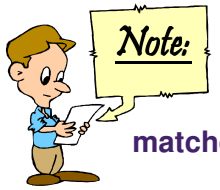
      i. **No Alert** – When this is selected the physician will not be contacted for urgent findings or critical studies.

ii. **Call Mobile Phone** – When this is selected the physician will be contacted via the mobile phone number that is entered.

iii. **Call Office Phone** – When this is selected the physician will be contacted via the office telephone number that is entered.

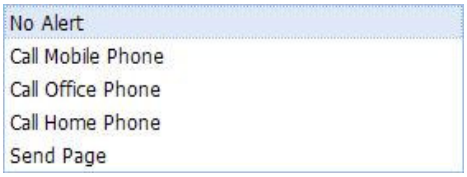
iv. **Call Home Phone** – When this is selected the physician will be contacted via the Home telephone number that is entered.

v. **Send Page** – When this is selected the physician will be contacted via their pager.

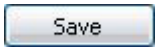


Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

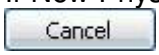
j. **Priority Alert #2** – This allows the physician to select the secondary alert method to be used when they need to be contacted regarding an urgent finding or critical study for one of their patients. Click on the arrow next to the field and select the desired method. The choices are:



4. On the right side is the Site Access panel which identifies the sites for which the new Physician has viewing authorization. Click on the checkbox for the sites, and a ✓ appears in the checkbox. To deselect a site that was selected in error, click on the checkbox again, and the ✓ is removed.

5. Once all of the fields are entered, click on the 

button.

If New Physician was selected in error, or if the information entered is not to be saved, click on the 

button to close the window.

Adding a New Location

One of the actions that can be taken is to add a new Location in the hospital or imaging site, which was not previously entered, such as an emergency room.

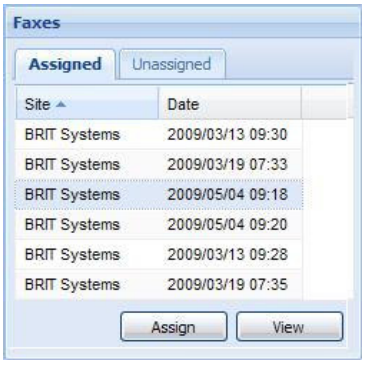
This is helpful in that the Site Coordinator can simply click on the New Location button without having to select the Users tab and add the new location then, then have to return to the Incomplete Orders [365] tab.

To add a new Location, follow these steps:

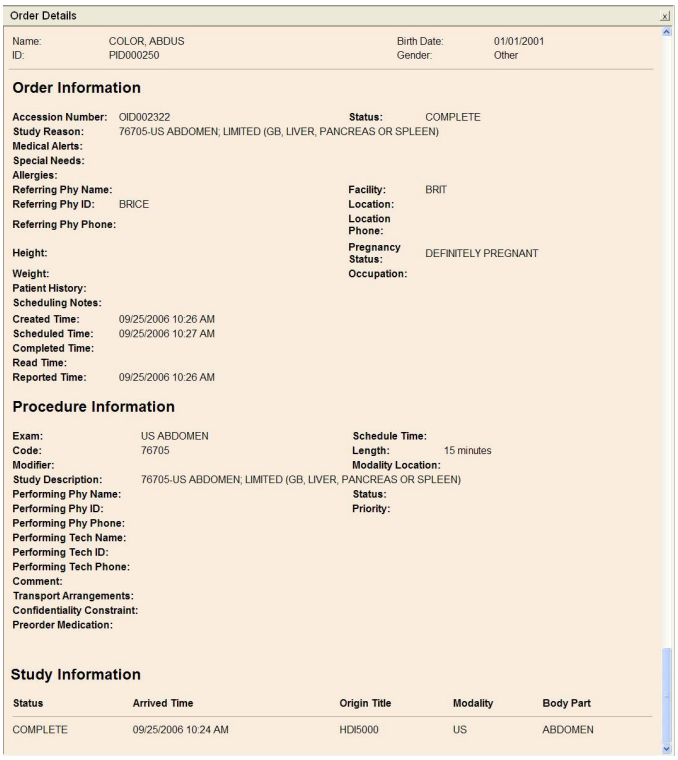
1. Click on the New Location button.
2. The New Location window opens, as shown here:
3. Fill out each of the fields with the information to define the new Location. These fields include:
   a. **Location ID** - This is the identification used by the system.
   b. **Location Name** – This is the name of the location, such as Emergency Room One, or ER West.
   c. **Primary #** – This is the main contact number for the location.
   d. **Secondary #** – This is the second contact number for the location.
   e. **Fax #** – This is the fax number for the new location.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.



In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the user has read the information, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

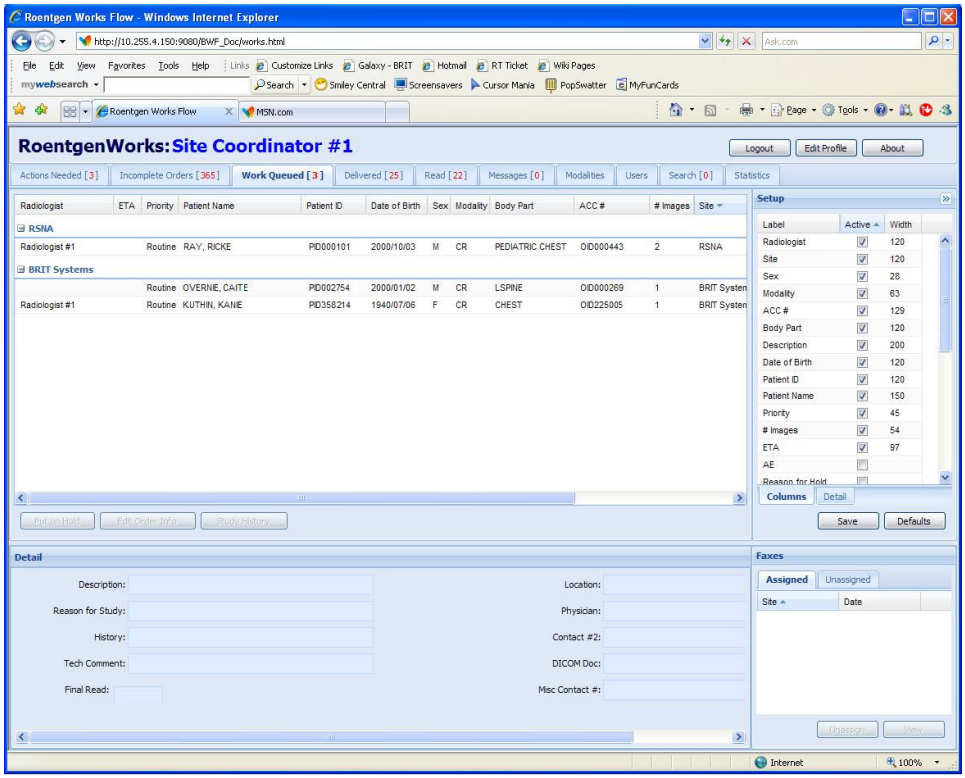
1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

Chapter 6 – Work Queued Tab

The Work Queued [2] tab contains the studies that have been assigned to the Radiologist, but are not downloaded or "delivered" yet; these are exams that are "queued" to be downloaded to the Radiologist's DICOM workstation that is defined in their user profile. Once the Radiologist begins accepting studies, they will be downloaded.

Components of the Work Queued Window

The Work Queued [2] tab window is shown below:



The number in **red** next to the tab indicates the number of studies listed in that tab.

Once the Radiologist logs in and begins accepting studies, the patient studies in the Work Queued [2] tab are then delivered.

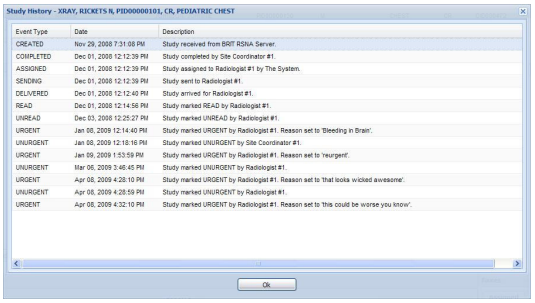
Once the images are delivered, the studies are removed from this window and placed in the Delivered [1] tab.

This chapter identifies the steps that can be performed in the Work Queued [2] tab.

Action Buttons

There are three buttons in the Work Queued [2] tab:

- Put on Hold – This Action button allows the Site Coordinator to place the study in the Action Needed [1] tab because of additional information that is needed before the Radiologist can complete the report. It can be seen by the Site Coordinator or the Service Manager.
- Edit Order Info – This Action button allows the Site Coordinator to modify the patient's order because of missing information the Radiologist needs to complete the study's report.
- Study History – This button allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and what the status was reset to by the last user.


Study History - XRAY, RICKETS II, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

Color Coding

The studies shown in the Work Queued [2] tab are color coded as follows:

- **Pink** – Alerts the Radiologists that the study has come in from the Site tagged as a "**Critical**" study. The Radiologist needs to select these studies for immediate read and diagnosis.
- **White** – Indicates that the study is a **Routine** study.
- **Blue** – Indicates that this is the **currently selected study**.

Selecting the Columns

The columns for the Work Queued [2] tab list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

There are a variety of additional columns available in the Setup panel, and these can be selected and added, or removed at any time.

The system default information shown for these studies in the Work Queued [2] tab includes:

- **# Images** – Displays the total number of images that are in the selected study.
- **ACC#** – Displays the Accession number assigned to the study.
- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed.
- **Date of Birth** – Displays the patient's birth date.
- **Description** – Displays the Study Description as entered either from the modality or from the order.
- **ETA** – Displays the Estimated Time of Arrival for the study to be delivered. The ETA is available only in the Work Queued, tab.
- **Modality** – Identifies the type of modality on which the study was performed.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name as sent from the sending site.
- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study.
- **Radiologist** – Displays the name of the Radiologist assigned to receive the study.
- **Sex** – Identifies the Gender of the patient.
- **Site** – Identifies the facility where the patient study was captured.

To change the columns, open the Setup panel by clicking on the « to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, then the column displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of all the available columns, see the section entitled Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Defaults button is selected.

The system default information shown for these studies in the Work Queued [2] window include:

- **Contact #2** – Identifies the backup contact to be used if the physician can't be reached.
- **Description** – Displays the Study Description as entered either from the modality or from the order.
- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **History** – Provides the brief patient history that was sent with the study.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact.
- **Misc Contact #** - Displays an additional telephone or pager number for an additional contact for the referring physician.
- **Physician** – Displays the name of the patient's referring physician.
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient.
- **Tech Comment** – Provides the text from the Technologist that were entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays on the Patient List. If the checkbox currently does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the selections available for the Details section, see the list in the Available Detail Selections section.

Taking Action in the "Work Queued" Window

There are three actions that can be taken with the patients listed in the Work Queued [2] list which is viewing the Study History.

- **Putting the study "On-Hold"**
- **Editing the Order information**
- **Viewing the history of the study**

Putting the Study "On-Hold"

There are times when the study requires additional information regarding the patient before a complete diagnosis can be dictated by the Radiologist. Typically, the Radiologist places the study "On-Hold; however, the Site Coordinator can also place a study "On-Hold". The study remains there until it is removed from hold as the required information is delivered.

To place the study "On-Hold:

1. Select the correct study.
2. Click on the Put on Hold button, and the pop-up window opens:

3. Fill in the "Reason for Hold" in the field.
4. Click on the Save button.
5. The study is moved to the Action Needed [1] tab.

If the incorrect study was selected, or the study does not have to be placed on hold, click on the Cancel to close the window without placing the study "On-Hold".

Once the information is completed, the study can be "Completed" and removed from the "On-Hold" state by the Site Coordinator.

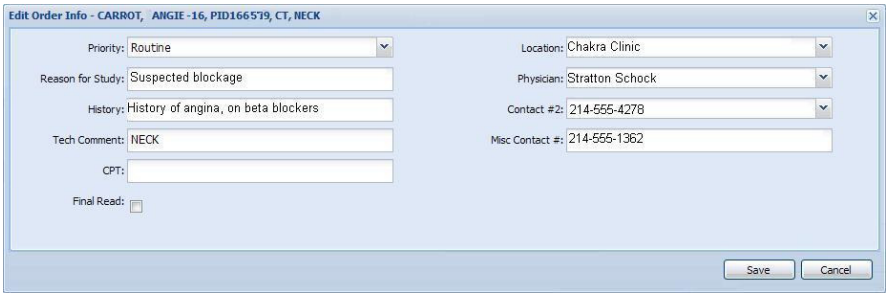
Editing the Order Information

The Order information for the Study can be edited by the Site Coordinator when changes, or updates, are needed.

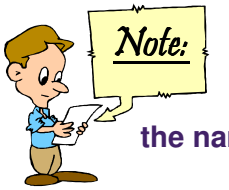
Be aware that the Order can only be edited until the study is marked as "Read".

To edit the Order information, follow these steps:

1. Select the patient with the Order information that needs to be changed.
2. The Edit Order Info pop-up window opens, as shown here:



3. Click on each field to be changed and enter the correct information.



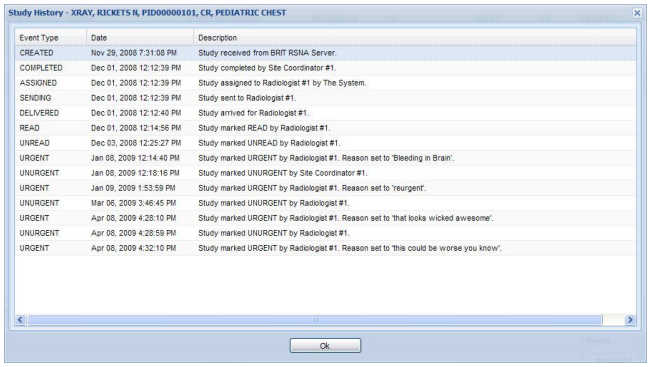
Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

4. Click on the Save button to retain the changes made. The changes are saved and the window closes.

If the incorrect patient was selected, or the changes do not need to be made, click on the Cancel button to close the window without retaining the changes.

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

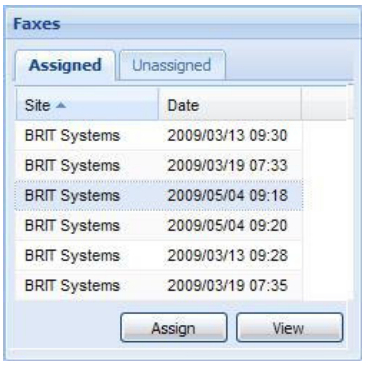

Study History - XRAY, RICKETS II, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

To view the study history:

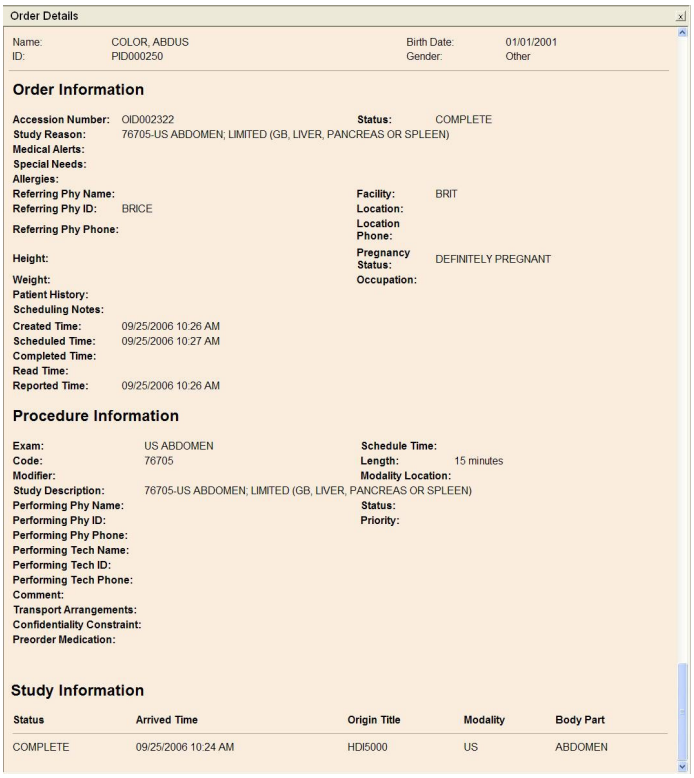
1. Make sure the correct patient study is selected.
2. Click on the Study History button.
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:
   - When the study was **created**
   - When the study was **completed by the Site Coordinator**
   - When the study was **assigned**
   - When the study was **sent**
   - When the study was **delivered**
   - When the study was **read**
   - When the study was **marked urgent**
   - When they study was **put "on-hold"**
4. When the user has the information needed, click on the Ok button to close the window.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.



In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the user has read the information, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

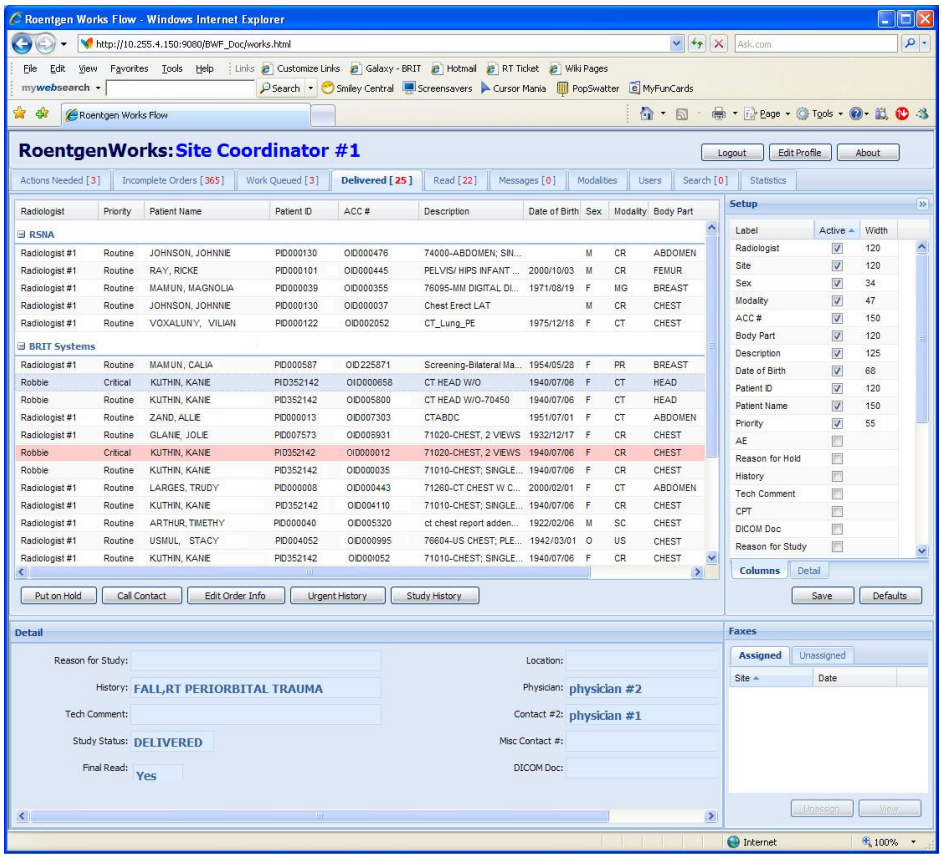
Chapter 7 – Delivered Tab

The Delivered [1] tab provides the Site Coordinator with a list of studies that have been delivered to the various Radiologists. The Site Coordinator can get a list of the studies grouped by Radiologist for easier viewing. These include both the Routine and Critical patient, and are color-coded to highlight and help identify the Critical patients.

This section identifies the components of the Delivered [1] tab, and the actions that can be taken with this tab.

Components of the Delivered Window

The Delivered [1] tab window is shown below:



The number in **red** next to the tab indicates the number of studies listed in that tab.

This window shows the studies that have been delivered to the various radiologists.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Delivered [1] tab.

Action Buttons

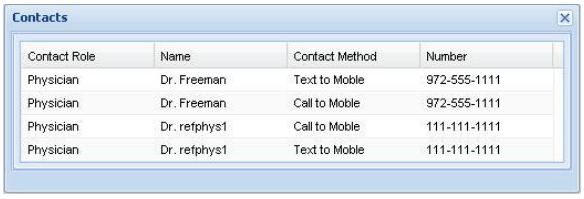
There are five buttons available in the Delivered [1] tab that allows the user to take specific actions for the patients in this list to complete the study and dictate a report on the viewing workstation.

These buttons are shown below:

- Put on Hold – This button allows the Site Coordinator to place the study in the Action Needed [1] tab because of additional information that is needed for the Radiologist to complete the report.

- Call Contact – This button displays a list of contact information for the referring physician identified on the study. Optionally, the Site Coordinator can use Skype contact the referring physician by automatically dialing through the workstation. Skype is a software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones.

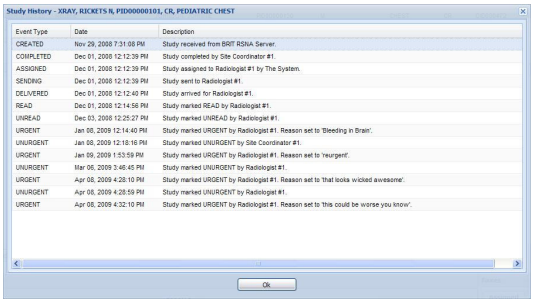
  When this button is selected a pop-up window opens to allow the Site Coordinator to select the referring physician who needs to be contacted regarding this patient. Click on the contact number to select the desired contact method.



- Edit Order Info – This Action allows the Site Coordinator to modify the patient's order because of missing information the Radiologist needs to complete the study's report.

- Urgent History - This Action button allows the Site Coordinator to view the comments and statuses of a study that has been identified as urgent.

- Study History – This button allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and what the status was reset to by the last user.


Study History - XRAY, RICKETS R, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

Color Coding

The studies are color coded as follows:

- **Pink** – Alerts the Radiologists that the study has come in from the Site tagged as a "**Critical**" study. The Radiologist needs to select these studies for immediate read and diagnosis.
- **White** – Indicates that the study is a **Routine** study.
- **Blue** – Indicates that this is the **currently selected study**. If there is an interface to a Radiologist viewing workstation, such as BRIT Vision, double-clicking on one of these selected patients, automatically downloads the study to the workstation without further action by the user to view the study. If there is not interface, the user must take additional action on the viewer to open the study.

Selecting Columns

The columns in the patient list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Delivered [1] tab includes:

- **ACC#** – Displays the Accession number assigned to the study.
- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed.
- **Date of Birth** – Displays the patient's birth date.
- **Description** – Displays the Study Description as entered either from the modality or from the order.
- **ETA** – Displays the Estimated Time of Arrival for the study to be delivered.
- **Modality** – Identifies the type of modality on which the study was performed.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name as sent from the sending site.
- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study.

- **Radiologist** – Displays the name of the Radiologist handling the study.
- **Sex** – Identifies the Gender of the patient.
- **Site** – Identifies the facility where the patient study was captured.

To change the columns selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, it displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:

- **Contact #2** – Identifies the backup contact to be used if the physician can't be reached.
- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **History** – Provides the brief patient history that was sent with the study.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact..
- **Misc Contact #** - Displays an additional telephone or pager number for an additional contact for the referring physician.
- **Physician** – Displays the name of the patient's referring physician.
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient.

- **Study Status** – Identifies the status of the study, such as On Hold, Urgent, Delivered, Unread, or Read. The Study Status
- **Tech Comment** – Provides the text from the Technologist that were entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam.

To change the Detail selections, open the Setup panel by clicking on the « to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the details display on the Patient List. If the checkbox currently has a ✓, when it is removed, the detail is not displayed on the Patient List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the "Delivered" Tab

There are several actions that can be taken to resolve the issues with the patients listed in the Delivered [1] list which include:

- **Putting the Study "On-Hold"**
- **Calling the referring physician contact**
- **Editing the Order information**
- **Viewing the Urgent History**
- **Viewing the Study History**

This section provides the steps to perform each of these daily tasks in the Delivered [1] tab.

Putting the Study "On-Hold"

There are times when the study requires additional information regarding the patient before a complete diagnosis can be dictated by the Radiologist. Typically, the Radiologist places the study "On-Hold; however, the Site Coordinator can also place a study "On-Hold". The study remains there until it is removed from hold as the required information is delivered.

To place the study "On-Hold:

1. Select the correct study.
2. Click on the Put on Hold button, and the pop-up window opens:
3. Fill in the "Reason for Hold" in the field.

4. Click on the Save button.

5. The study is moved to the Action Needed [1] tab.

If the incorrect study was selected, or the study does not have to be placed on hold, click on the Cancel button to close the window without placing the study "On-Hold".

Once the information is completed, the study can be "Completed" and removed from the "On-Hold" state by the Site Coordinator.

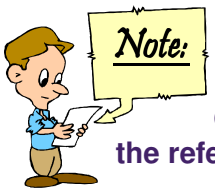
Calling the Referring Physician

Once an Urgent Finding has been identified by the Radiologist, the referring physician must be contacted as quickly as possible to ensure expedited care for the patient. One of the optional features of this system is an automated integration with BRIT Phone or to the Skype application.

Skype is an optional software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones. It allows the user to effortlessly contact the referring physician by simply clicking on the Call Contact button, double-clicking on the desired contact's phone number, and dialing through the workstation via the Skype application.

The contact information may be automatically entered from the HL-7 message; however, this is not always available. Other methods for getting the contact information entered include:

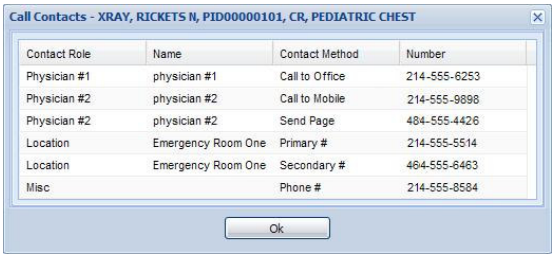
- Importing the file with the Referring Physician information
- Users with proper authority can manually enter the Referring Physician information
- Referring Physicians can maintain and update their own contact information.



The Referring Physician contact information must be entered into the Roentgen Works database in order for Skype to have a list of telephone, pager, or alternate number to use to contact the referring physician. Generally, the Site Coordinator at the facility is responsible for establishing the referring physician's contact information, but the users update their own profile.

To call the referring physician:

1. Make sure the correct patient study is selected.
2. Click on the Call Contact button.
3. When this button is selected a pop-up window



opens to allow the Radiologist to click on the desired contact method for the referring physician.

4. Click on the desired contact number to select the number to call.

5. If Skype is being used, double-click on the number and the system automatically dials the number, and the call is connected.

When the Ok button is selected, the Call Contacts window closes.

If the referring physician answers, the call is connected between the two parties.

If the referring physician does not answer, Skype can continue autodialing until the contact is made.

Notifications Using BRIT Phone

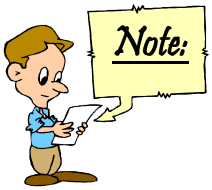
BRIT Phone is initiated automatically each time the Urgent Finding action is taken, or if additional updates are made. This application alerts the referring physician that the Radiologist has found an issue that needs immediate action for the patient. The following actions are taken by BRIT Phone when Urgent Finding is used:

- Calls the Referring Physician
- Makes an announcement requesting verification of name
- The user presses “1” to verify they are the intended recipient, or can hang up.
- If the correct recipient is identified, the announcement is made regarding the patient name, ID, and the urgent finding indicated by the Radiologist.
- The user can elect to:
    4. Press “1” to simply Acknowledge the call
    5. Press “2” to call the Radiologist who identified the urgent finding.
    6. Press “3” to call the patient Location, and alert them to the urgent finding.
- The user can then hang up.

BRIT Phone only makes calls to the Referring Physician when the Urgent status is updated, it does not place calls when the Site Coordinator adds Notes or completes the Urgent finding.

Editing the Order Information

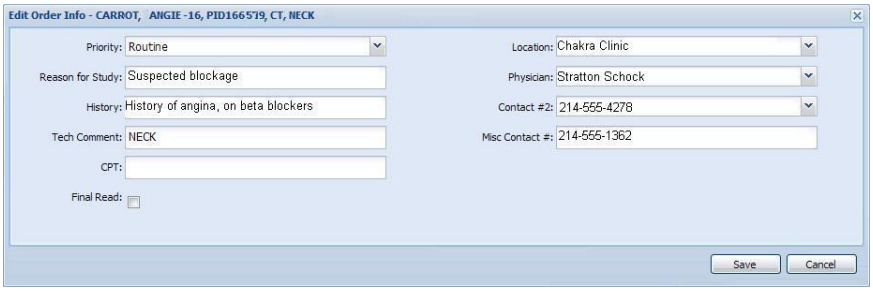
The Order information for the Study can be edited by the Site Coordinator when changes, or updates, are needed.



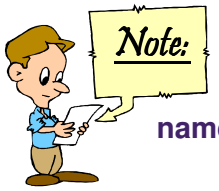
Be aware that the Order can only be edited until the study is marked as "Read".

To edit the Order information:

1. Select the correct patient.
2. Select the patient with the Order information that needs to be changed.
3. The Edit Order Info pop-up window opens, as shown here:



4. Click on each field to be changed and enter the correct information.



Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

5. Click on the Save button to retain the changes made. The changes are saved and the window closes.

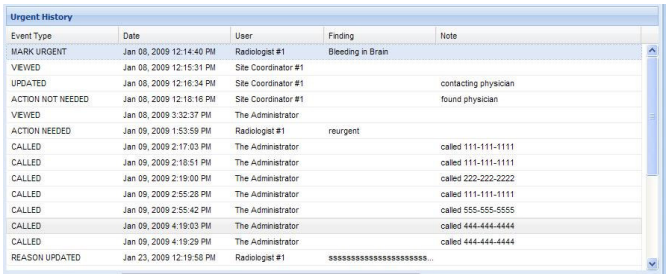
If the incorrect patient was selected, or the changes do not need to be made, click on the Cancel to close the window without retaining the changes.

Viewing the Urgent History

The Urgent History for the study can be viewed by the Site Coordinator to see the comments and statuses of a study that has been identified as urgent by another user, typically the Radiologist.

To view the urgent history:

1. Make sure the correct patient study is selected.
2. Click on the Urgent History button.
3. The Urgent history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as Viewed, Updated, or Called.
4. Click on the x at the top to close the window.

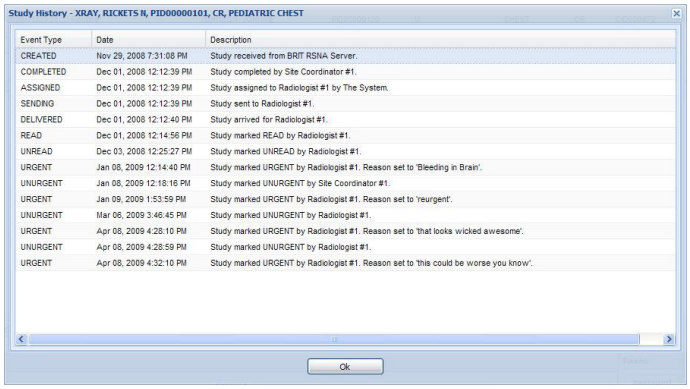

Urgent History
Event Type | Date | User | Finding | Note
MARK URGENT | Jan 08, 2009 12:14:40 PM | Radiologist #1 | Bleeding in Brain |
VIEWED | Jan 08, 2009 12:15:31 PM | Site Coordinator #1 | |
UPDATED | Jan 08, 2009 12:16:34 PM | Site Coordinator #1 | | contacting physician
ACTION NOT NEEDED | Jan 08, 2009 12:18:16 PM | Site Coordinator #1 | | found physician
VIEWED | Jan 08, 2009 3:32:37 PM | The Administrator | |
ACTION NEEDED | Jan 09, 2009 1:53:59 PM | Radiologist #1 | reurgent |
CALLED | Jan 09, 2009 2:17:03 PM | The Administrator | | called 111-111-1111
CALLED | Jan 09, 2009 2:18:51 PM | The Administrator | | called 111-111-1111
CALLED | Jan 09, 2009 2:19:00 PM | The Administrator | | called 222-222-2222
CALLED | Jan 09, 2009 2:55:28 PM | The Administrator | | called 111-111-1111
CALLED | Jan 09, 2009 2:55:42 PM | The Administrator | | called 555-555-5555
CALLED | Jan 09, 2009 4:19:03 PM | The Administrator | | called 444-444-4444
CALLED | Jan 09, 2009 4:19:29 PM | The Administrator | | called 444-444-4444
REASON UPDATED | Jan 23, 2009 12:19:58 PM | Radiologist #1 | sssssssssssssssssssss...

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

To view the study history:

1. Make sure the correct patient study is selected.
2. Click on the Study History button.
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:

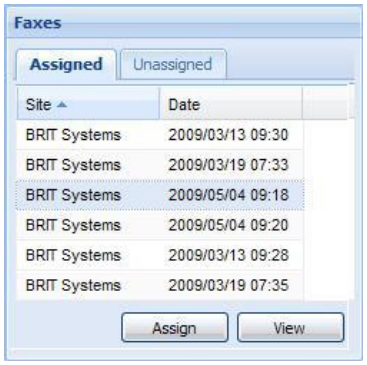

Study History - XRAY, RICKETS N, PID00000101, CR, PEDIATRIC CHEST
Event Type | Date | Description
CREATED | Nov 29, 2008 7:31:08 PM | Study received from BRIT RSNA Server.
COMPLETED | Dec 01, 2008 12:12:39 PM | Study completed by Site Coordinator #1.
ASSIGNED | Dec 01, 2008 12:12:39 PM | Study assigned to Radiologist #1 by The System.
SENDING | Dec 01, 2008 12:12:39 PM | Study sent to Radiologist #1.
DELIVERED | Dec 01, 2008 12:12:40 PM | Study arrived for Radiologist #1.
READ | Dec 01, 2008 12:14:56 PM | Study marked READ by Radiologist #1.
UNREAD | Dec 03, 2008 12:25:27 PM | Study marked UNREAD by Radiologist #1.
URGENT | Jan 08, 2009 12:14:40 PM | Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT | Jan 08, 2009 12:18:16 PM | Study marked UNURGENT by Site Coordinator #1.
URGENT | Jan 09, 2009 1:53:59 PM | Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT | Mar 06, 2009 3:46:45 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:28:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT | Apr 08, 2009 4:28:59 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:32:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

- When the study was **created**
- When the study was **completed by the Site Coordinator**
- When the study was **assigned**
- When the study was **sent**
- When the study was **delivered**
- When the study was **read**
- When the study was **marked urgent**
- When they study was **put "on-hold"**

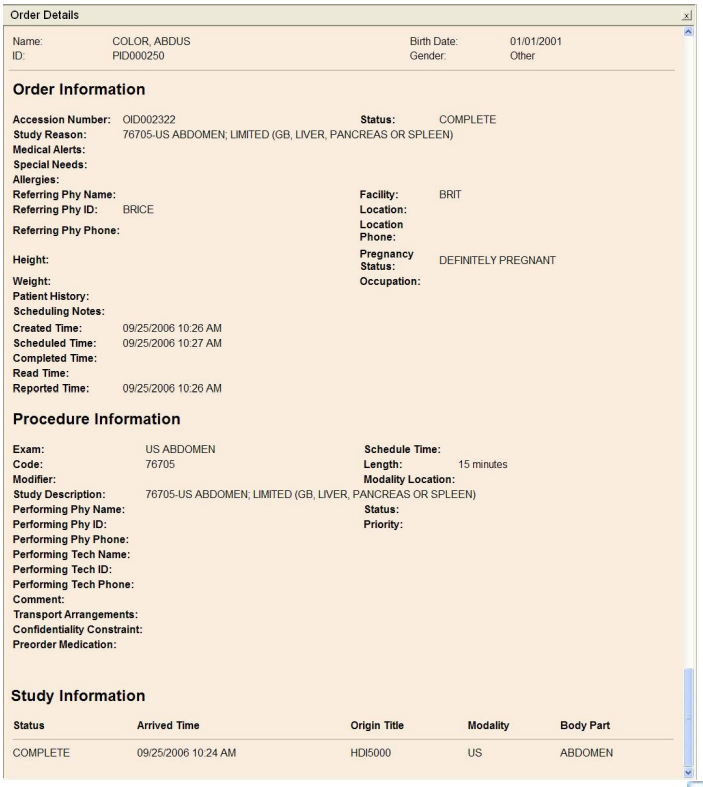
4. When the desired information is received, click on the Ok button to close the window.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.



In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the desired information is read by the user, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

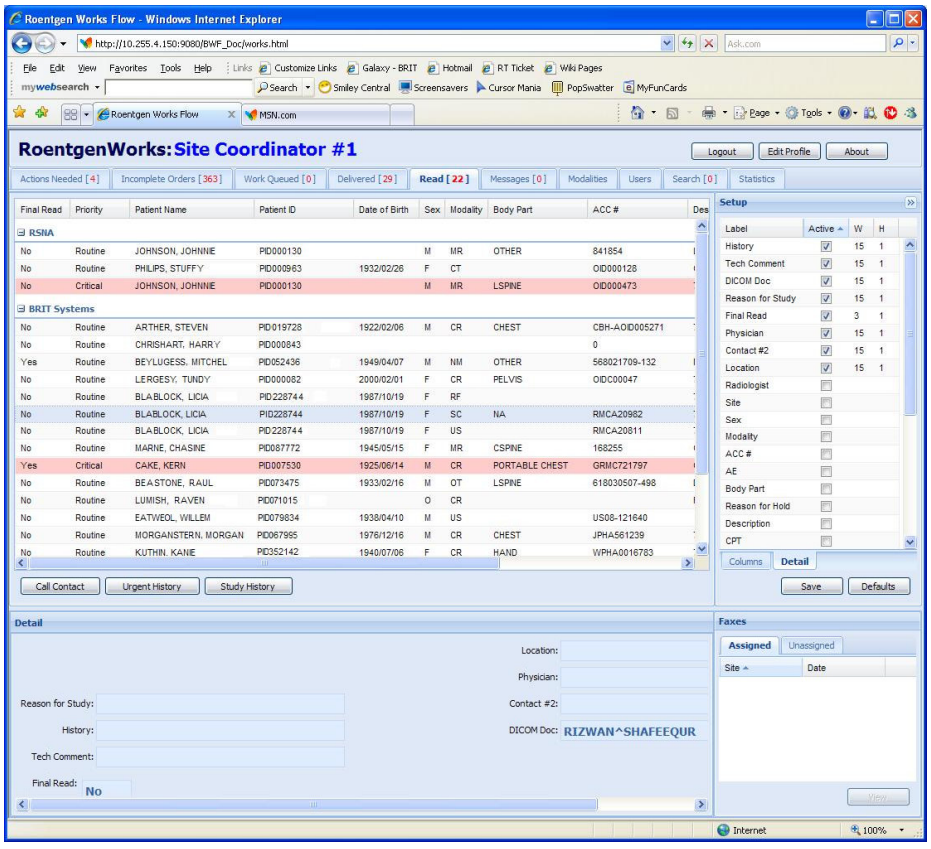
Chapter 8 – Read Tab

The Read [27] tab contains a list of the patient studies that have been read by the Radiologist, and for which a report has been dictated and completed. The studies in this tab include both the Routine and Critical patients, and are color-coded to highlight and help identify the Critical patient's studies. This provides the Site Coordinator with a list of the studies all Radiologists have marked as "Read".

This section identifies the components, uses, and features of the Read [27] tab.

Components of the Read Window

The Read [27] Queue window is shown below:



The number in **red** next to the tab indicates the number of studies listed in that tab.

As the studies were marked "Read" by the Radiologist they are moved to this Read [27] tab.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Read [27] tab.

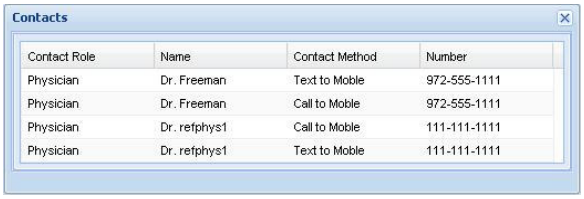
Action Buttons

There are three Action buttons available in the Read [27] tab that allows the user to take specific actions for the patients in this list to complete the study and dictate a report on the viewing workstation.

These buttons are shown below:

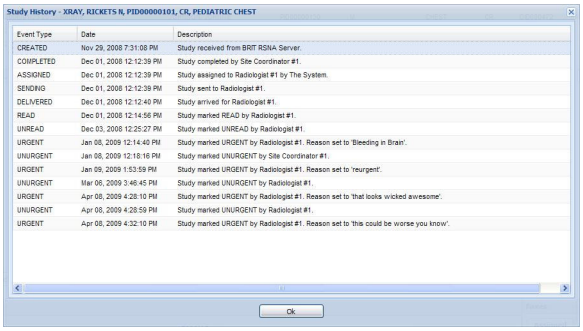
- Call Contact – This button displays a list of contact information for the referring physician identified on the study. Optionally, the Site Coordinator can use Skype contact the referring physician by automatically dialing through the workstation. Skype is an optional software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones.

  When this button is selected a pop-up window opens to allow the Site Coordinator to select the referring physician who needs to be contacted regarding this patient. Click on the contact number to select the desired contact method.



- Urgent History - This Action button allows the Site Coordinator to view the comments and statuses of a study that has been identified as urgent.

- Study History – This button allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and what the status was reset to by the last user.


Study History - XRAY, RICKETS N, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
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Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

Color Coding

The studies are color coded as follows:

- **Pink** – Alerts the Radiologists that the study has come in from the Site tagged as a "**Critica**" study. The Radiologist needs to select these studies for immediate read and diagnosis.

- **White** – Indicates that the study is a Routine study.

- **Blue** – Indicates that this is the currently selected study. If there is an interface to a Radiologist viewing workstation, such as BRIT Vision, double-clicking on one of these selected patients, automatically downloads the study to the workstation without further action by the user to view the study. If there is not interface, the user must take additional action on the viewer to open the study.

Selecting the Columns

The columns in the patient list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Read [27] tab includes:

- **ACC#** – Displays the Accession number assigned to the study.
- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed.
- **Date of Birth** – Displays the patient's birth date.
- **Description –** Displays the Study Description as entered either from the modality or from the order.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **Modality** – Identifies the type of modality on which the study was performed.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name as sent from the sending site.
- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study.
- **Radiologist** – Displays the name of the Radiologist handling the study.
- **Sex** – Identifies the Gender of the patient.
- **Site** – Identifies the facility where the patient study was captured.

To change the columns, open the Setup panel by clicking on the « to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, the column displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:

- **Contact #2** – Displays the backup contact in case the Referring Physician can not be reached.
- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **History** – Provides the brief patient history that was sent with the study.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact..
- **Physician** – Displays the name of the patient's referring physician.
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient.
- **Tech Comment** – Provides the text from the Technologist that were entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, it displays on the Patient List. If the checkbox currently does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the "Read" Tab

There are several actions that can be taken with the patients listed in the Read [27] list which include:

- **Calling the referring physician contact**
- **Viewing the Urgent History**
- **Viewing the Study History**

This section provides the steps to perform each of these daily tasks in the Read [27] tab.

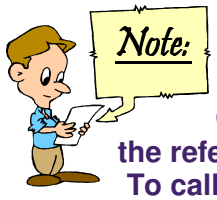
Calling the Referring Physician

Once an Urgent Finding has been identified by the Radiologist, the referring physician must be contacted as quickly as possible to ensure expedited care for the patient. One of the optional features of this system is an automated integration with BRIT Phone or to the Skype application.

Skype is an optional software package that enables the user to make telephone calls anywhere in the world automatically by connecting through the computer to landline or mobile phones. It allows the user to effortlessly contact the referring physician by simply clicking on the Call Contact button, double-clicking on the desired contact's phone number, and dialing through the workstation via the Skype application.

The contact information may be automatically entered from the HL-7 message; however, this is not always available. Other methods for getting the contact information entered include:

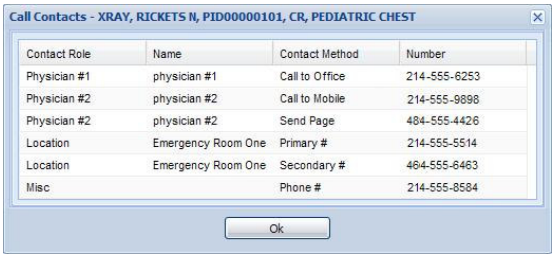
- Importing the file with the Referring Physician information
- Users with proper authority can manually enter the Referring Physician information
- Referring Physicians can maintain and update their own contact information.



The Referring Physician contact information must be entered into the Roentgen Works database in order for Skype to have a list of telephone, pager, or alternate number to use to contact the referring physician. Generally, the Site Coordinator at the facility is responsible for establishing the referring physician's contact information, but the users update their own profile.

To call the referring physician:

1. Make sure the correct patient study is selected.



2. Click on the Call Contact button.

3. When this button is selected a pop-up window opens to allow the Radiologist to click on the desired contact method for the referring physician.

4. Click on the desired contact number to select the number to call.

5. If Skype is being used, double-click on the number for the system to automatically dial the number, and connect the call.

When the Ok button is selected, the Call Contacts window closes.

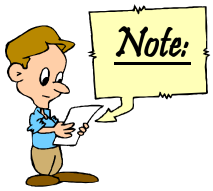
If the referring physician answers, the call is connected between the two parties.

If the referring physician does not answer, Skype can continue autodialing until the contact is reached.

Notifications Using BRIT Phone

BRIT Phone is initiated automatically each time the Urgent Finding action is taken, or if additional updates are made. This application alerts the referring physician that the Radiologist has found an issue that needs immediate action for the patient. The following actions are taken by BRIT Phone when Urgent Finding is used:

- Calls the Referring Physician
- Makes an announcement requesting verification of name
- The user presses “1” to verify they are the intended recipient, or can hang up.
- If the correct recipient is identified, the announcement is made regarding the patient name, ID, and the urgent finding indicated by the Radiologist.
- The user can elect to:
  1. Press “1” to simply Acknowledge the call
  2. Press “2” to call the Radiologist who identified the urgent finding.
  3. Press “3” to call the patient Location, and alert them to the urgent finding.
- The user can then hang up.

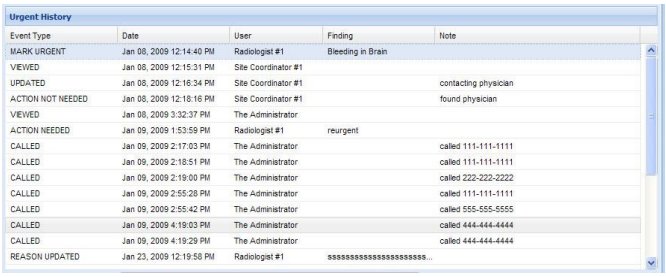


BRIT Phone only makes calls to the Referring Physician when the Urgent status is updated, it does not place calls when the Site Coordinator adds Notes or completes the Urgent finding.

Viewing the Urgent History

The Urgent History for the study can be viewed by the Site Coordinator to see the comments and statuses of a study that has been identified as urgent by another user, typically the Radiologist.

To view the urgent history:



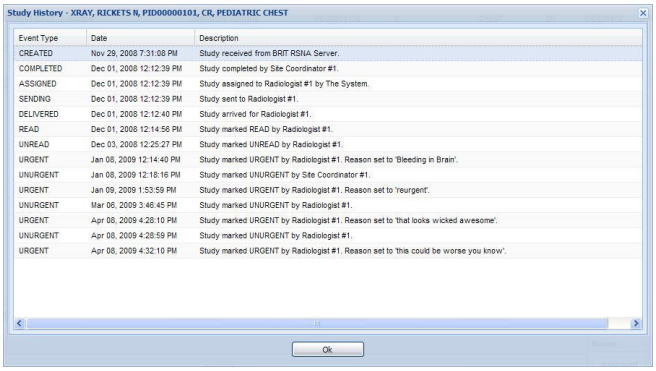
1. Make sure the correct patient study is selected.
2. Click on the

button.
3. The Urgent history pop-up window opens and displays all events that have been posted regarding the study such as Viewed, Updated, or Called.
4. Click on the x at the top to close the window.

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

To view the study history:


Study History - XRAY, RICKETS N, PID00000101, CR, PEDIATRIC CHEST
Event Type
Date
Description
CREATED
Nov 29, 2008 7:31:08 PM
Study received from BRIT RSNA Server.
COMPLETED
Dec 01, 2008 12:12:39 PM
Study completed by Site Coordinator #1.
ASSIGNED
Dec 01, 2008 12:12:39 PM
Study assigned to Radiologist #1 by The System.
SENDING
Dec 01, 2008 12:12:39 PM
Study sent to Radiologist #1.
DELIVERED
Dec 01, 2008 12:12:40 PM
Study arrived for Radiologist #1.
READ
Dec 01, 2008 12:14:56 PM
Study marked READ by Radiologist #1.
UNREAD
Dec 03, 2008 12:25:27 PM
Study marked UNREAD by Radiologist #1.
URGENT
Jan 08, 2009 12:14:40 PM
Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT
Jan 08, 2009 12:18:16 PM
Study marked UNURGENT by Site Coordinator #1.
URGENT
Jan 09, 2009 1:53:59 PM
Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT
Mar 06, 2009 3:46:45 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:28:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT
Apr 08, 2009 4:28:59 PM
Study marked UNURGENT by Radiologist #1.
URGENT
Apr 08, 2009 4:32:10 PM
Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

1. Make sure the correct patient study is selected.
2. Click on the

button.
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:

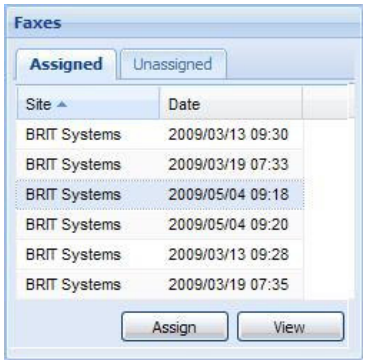
   - When the study was **created**

- When the study was **completed by the Site Coordinator**
- When the study was **assigned**
- When the study was **sent**
- When the study was **delivered**
- When the study was **read**
- When the study was **marked urgent**
- When they study was **put "on-hold"**

4. When the desired information is read, click on the Ok button to close the window.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.

In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the user has read the information, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

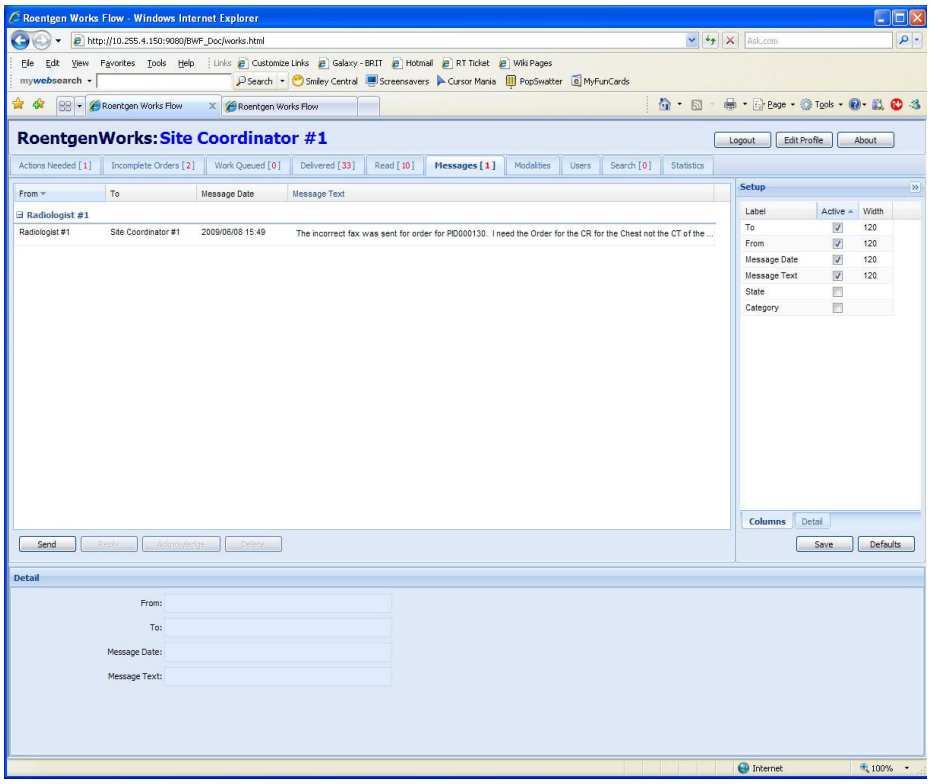
Chapter 9 – Messages Tab

The Messages [6] tab contains a list of the messages that have been sent to the Site Coordinator. These could be from any of the users, including the Service Manager, the Radiologist, any other physician, and there can also be System generated messages, as well.

This section identifies the components, uses, and features of the Messages [6] tab.

Components of the Messages Window

The Messages [6] tab window is shown below:



The number in **red** next to the tab indicates the number of messages listed in that tab.

Messages can be sent from other users of the system, or from the system itself. The information that is included for each message contains:

- **Message Date**
- **From**
- **Message Text**
- **Category**
- **Code**
- **State**
- **Link Count**

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Messages [6] tab.

Action Buttons

There are four buttons available in the Messages [6] tab that allows the user to take specific actions for the patients in this list to complete the study and dictate a report on the viewing workstation.

These buttons are shown below:

- Send – This button allows the Site Coordinator to send a message to another user in the system.
- Reply – This button allows the Site Coordinator to respond to the currently selected message.
- Acknowledge – This button allows the Site Coordinator to send a notification that the message has been received and read.
- Delete – This button allows the Site Coordinator to remove the selected message from the screen.

Color Coding

There is no specific color coding for the messages.

Selecting the Columns

The columns in the patient list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these messages in the Messages [6] tab includes:

- **From** – Identifies the sender of the message.
- **Message Date** – Identifies the date the message was created.
- **Message Text** – Contains the complete text of the message created by the sender.
- **To** – Provides the name of the recipient of the message.

To change the column selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the heading column. If the checkbox has a ✓, then the column displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom shows the detailed information about the message.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these messages in the

window include:

- **From** – Identifies the sender of the message.
- **Message Date** – Identifies the date the message was created
- **Message Text** – Contains the complete text of the message created by the sender.
- **To** – Provides the name of the recipient of the message.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays on the Patient List. If the checkbox does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the Messages Tab

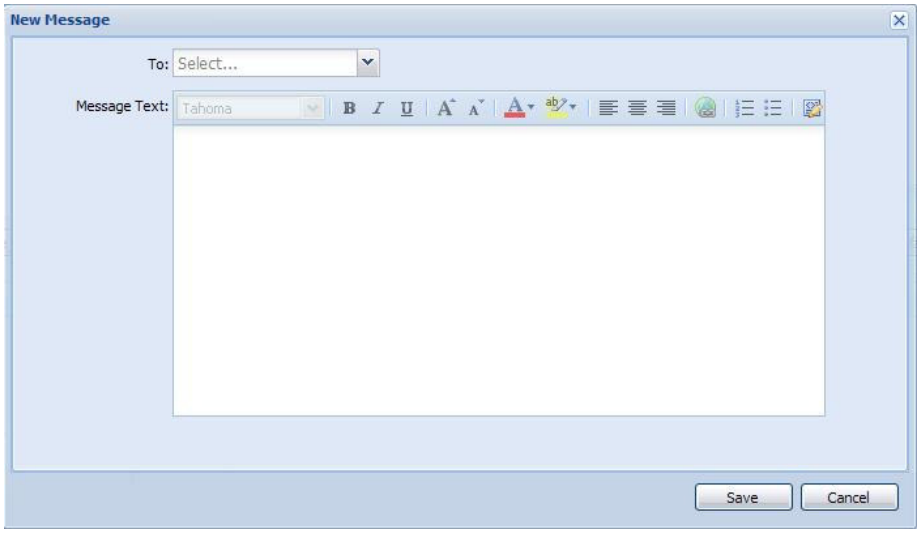
There are several actions that can be taken with the messages listed in the Messages [6] list which include:

- **Sending a Message**
- **Replying to a Message**
- **Acknowledging a Message**
- **Deleting a Message**

This section provides the steps to perform each of these daily tasks in the Messages [6] tab.

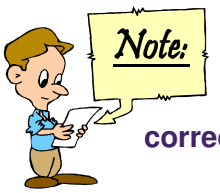
Sending a Message

The Site Coordinator can send a message to anyone in the system by clicking on the Send button. The New Message window opens, as shown below:



To send a message:

1. Click on the next to the To: field to select the recipient of the message from the drop-down menu.



Note that a shortcut to finding the recipient is to begin typing their name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

2. Type the message in the window.
3. Click on the Save button to save the message and send it.
4. The New Message window closes and the message is sent.

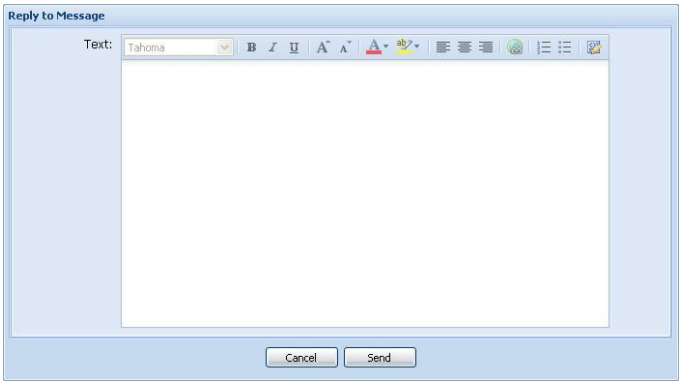
To close the window without sending a message, click on the Cancel button.

For the text in the message, the following can be selected for specific text by the user by selecting the text to which it applies, then selecting the desired text enhancement item:

- **Font** – change the font by selecting the drop-down for Tahoma
- **Bold Text** – change the font by selecting the B
- **Italicized Text** – change the font by selecting the I
- **Underlined Text** – change the font by selecting the U
- **Increase Font Size** – change the font by selecting the A
- **Decrease Font Size** – change the font by selecting the A
- **Text Color** – change the font by selecting the A
- **Highlighting of Text** – change the font by selecting the ab
- **Left, Center, or Right margin justification** – change the font by selecting the
- **Hyperlinked Text** – change the font by selecting the
- **Numbered List** – change the font by selecting the
- **Bulleted List** – change the font by selecting the
- **Source Editing** – change the font by selecting the

Replying to a Message

The Site Coordinator can reply to a message that is in their inbox.



To reply to a message:

1. Click on the message on which to reply.
2. Click on the Reply button.
3. Type the message in the window.

4. Click on the Save button to save the message and send it.
5. The Reply Message window closes and the message is sent.

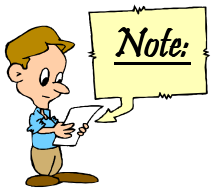
To close the window without sending a message, click on the Cancel button.

Acknowledging a Message

The Site Coordinator can acknowledge a message that is in their inbox.

To acknowledge a message:

1. Click on the message on which to acknowledge.
2. Click on the Acknowledge button.
3. The acknowledgement is sent.



Be aware, there is no visual confirmation that the acknowledgement was successfully sent.

Deleting a Message

The Site Coordinator can delete a message that is in their inbox.

To delete a message:

1. Click on the message that needs to be removed.
2. Click on the Delete button.
3. The selected message is immediately deleted

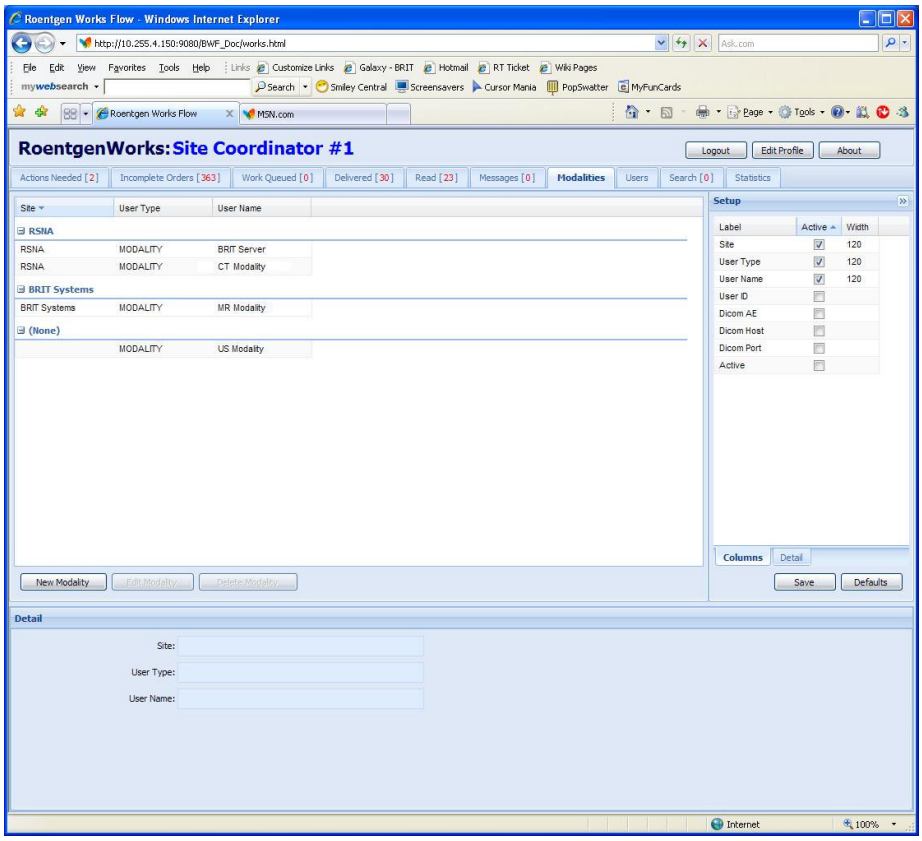
Chapter 10 – Modalities Tab

The Modalities tab allows the Site Coordinator to view the modalities that are sending studies to the group, as well as add, modify, and remove modalities.

This section identifies the components, uses, and features of the Modalities tab.

Components of the Modalities Window

The window that opens when the Modalities tab is selected is shown below:



The number in **red** next to the tab indicates the number of modalities listed in that tab.

This window allows the Site Coordinator to add, modify, delete, and view the modalities that are defined and integrated on the system.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Modalities tab.

Action Buttons

There are three buttons available in the Modalities tab that allows the user to easily add, modify, or remove a modality.

- New Modality – This Action button allows the Site Coordinator to define new modalities.
- Edit Modality – This Action button allows the Site Coordinator to modify information for an existing modality.
- Delete Modality – This Action button is allows the Site Coordinator to remove an existing modality permanently.

Color Coding

There is no specific color coding for the modalities.

Selecting Columns

The columns in the list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Search tab includes:

- **Site** – Identifies the facility where the modality is located.
- **User Name** – Identifies the user name that is assigned to the modality.
- **User Type** – Identifies the type of modality.

To change the columns, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, then the column displays in the List. If the checkbox currently does not have a ✓, the column is not displayed in the List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected modality.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Defaults button is selected.

The system default information shown for these studies in the Search window include:

- **Site** – Identifies the facility where the modality is located.
- **User Name** – Identifies the user name that is assigned to the modality.
- **User Type** – Identifies the type of user, such as a modality.

To change the Detail selections, open the Setup panel by clicking on the « to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays in the List. If the checkbox does not have a ✓, the details are not displayed in the List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the Modalities Tab

There are several actions that can be taken in the Modalities tab which include:

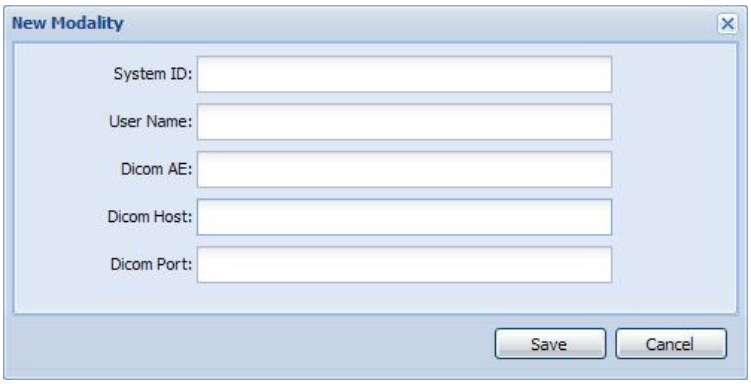
- **Add a new modality**
- **Edit an existing modality**
- **Delete an existing modality**

This section provides the steps to perform each of these daily tasks in the Modalities tab.

Adding a New Modality

One of the actions that can be taken is to add a new modality to send studies to the Roentgen Works server.

To add a new modality:



1. Click on the New Modality button.
2. The New Modality window opens, as shown here:
3. Fill out each of the fields with the information to define the new modality. These fields include:
   a. **System ID** - This is the name that identifies the modality to the server.
   b. **User Name** – This is a more common name that the users would identify with the modality.
   c. **DICOM AE** – This is the DICOM Application Entity title for the modality.
   d. **DICOM Host** – This is the IP Address of the modality.
   e. **DICOM Port** – This is the DICOM port number on which the modality communicates.
4. Once all of the fields are entered, click on the Save button.

If New Modality was selected in error, or if the information entered is not to be saved, click on the Cancel button to close the window.

The Roentgen Works server runs in “Strict” mode, meaning it does not accept studies from a modality unless (1) the modality is properly configured in Roentgen Works and (2) the modality has Roentgen Works properly configured. To be properly configured, the IP address, port number, and AE Title must be correct. AE Titles are case sensitive.

Editing an Existing Modality

One of the actions that can be taken is to modify an existing modality on which patient studies are currently being taken and sent to the system.

To edit an existing modality:

1. Click on the Edit Modality button.

2. The Edit Modality window opens, as shown here:

3. Fill out each of the fields with the information to modify the existing modality. The fields that can be updated include:

   a. **User Name** – Click on the field and type in the updated name that the users would identify with the modality.

   b. **DICOM AE** – Click on the field and type in the updated DICOM Application Entity title for the modality.

   c. **DICOM Host** – Click on the field and type in the updated IP Address of the modality.

   d. **DICOM Port** – Click on the field and type in the updated DICOM port number on which the modality communicates.

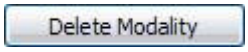
4. Once all of the fields to be corrected are entered, click on the Save button.

If Edit Modality was selected in error, or if the information entered is not to be saved, click on the Cancel button to close the window.

Deleting an Existing Modality

One of the actions that can be taken is to remove an existing modality on which patient studies are currently being taken and sent to the system.

To delete an existing modality:

1. Click on the 

button.

2. The Modality is immediately removed from the window.

Be aware there is no confirmation window that opens to confirm the correct modality is selected, so be very careful to select the correct modality to delete.

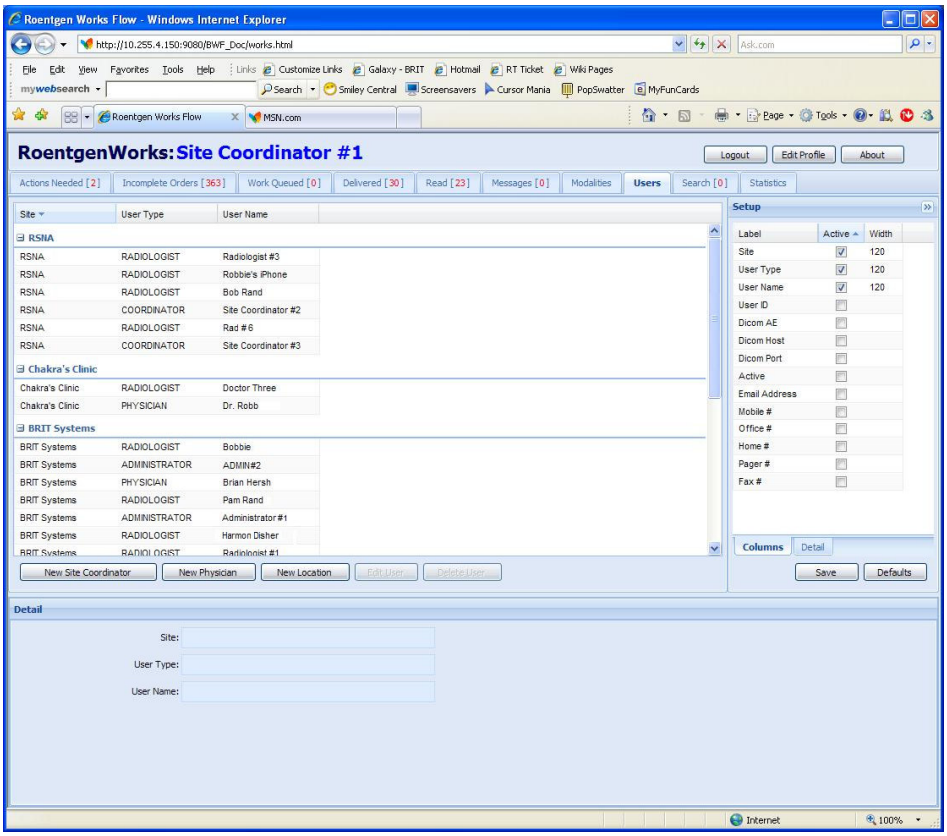
Chapter 11 – Users Tab

The Users tab allows the Site Coordinator to view the users that are currently defined on the system, add new users, add new locations, edit users, and remove users.

This section identifies the components, uses, and features of the Users tab.

Components of the Users Window

The window that opens when the Users tab is selected is shown below:



The number in **red** next to the tab indicates the number of users listed in that tab.

This window allows the Site Coordinator to add, modify, delete, and view the user that are defined and authorized to use the system.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Users tab.

Action Buttons

There are five buttons available in the Users tab that allows the Site Coordinator to easily add, modify, or remove users, as well as add a new location.

- New Site Coordinator – This Action button allows the Site Coordinator to define new Site Coordinator for a hospital or imaging facility.
- New Physician – This Action button allows the Site Coordinator to define a new referring physician at one of the imaging centers or hospital facilities.
- New Location – This Action button allows the Site Coordinator to define a new patient location at the facility to be notified of patient findings.
- Edit User – This Action button allows the Site Coordinator to make changes to the user's profile.
- Delete User – This Action button allows the Site Coordinator to permanently remove a user from accessing the system.

Color Coding

There is no specific color coding for the users or the location.

Selecting the Columns

The columns in the user list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Users tab includes:

- **Site** – Identifies the facility where the patient study was captured.
- **User Name** – Identifies the name of the selected user.
- **User Type** – Identifies the type of user, such as Site Coordinator, Radiologist, Physician, Service Manager, or Location, such as the Emergency Room.

To change the columns, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, then the column displays in the List. If the checkbox currently does not have a ✓, the column is not displayed in the List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:

- **Site** – Identifies the facility where the patient study was captured.
- **User Name** – Identifies the user name that is assigned to the selected user.
- **User Type** – Identifies the type of user. The type could be Site Coordinator, Physician, or Location, such as the Emergency Room.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays in the List. If the checkbox currently does not have a ✓, the detail is not displayed in the List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the Users Tab

There are several actions that can be taken in the Users tab which include:

- **Add a new Site Coordinator**
- **Add a new Physician**
- **Add a new Location**
- **Edit a new User**
- **Delete an existing user**

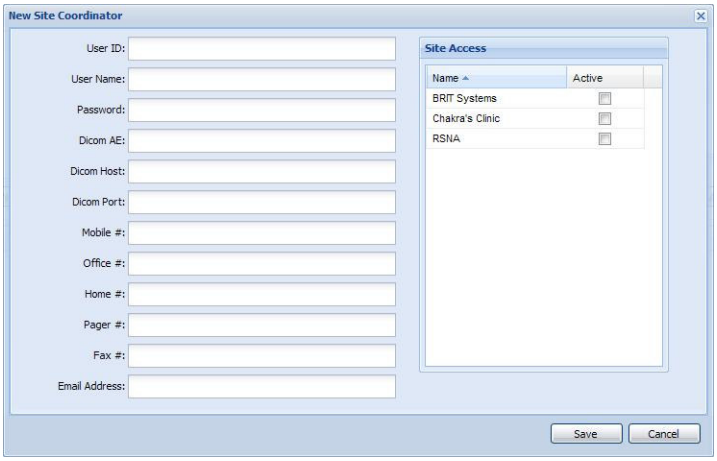
This section provides the steps to perform each of these daily tasks in the Users tab.

Adding a Site Coordinator

One of the actions that can be taken is to add a new Site Coordinator on who will be responsible for the Site Coordinator duties at the hospital or imaging facility.

To add a new Site Coordinator:

1. Click on the New Site Coordinator button.
2. The New Site Coordinator window opens, as shown here:



3. Fill out each of the fields with the information to define the new Site Coordinator. These fields include:

   a. **User ID** - This is the identification that the user enters to log into the system.

   b. **User Name** – This is the name of the user.

   c. **Password** – This is the code that the new Radiologist enters when they log into the system the first time.

   d. **DICOM AE** – This is the DICOM Application Entity title for the user's workstation.

e. **DICOM Host** – This is the DICOM host name to which the user's workstation is communicating.

f. **DICOM Port** – This is the DICOM port number on which the user's workstation communicates.

g. **Mobile #** – This is the cell phone number for the new user.

h. **Office #** – This is the office telephone number for the new user.

i. **Home #** – This is the home telephone number for the new user.

j. **Pager #** – This is the pager number for the new user.

k. **Fax #** – This is the fax number for the new user.

l. **E-mail Address** – This is the e-mail address for the new user.

4. On the right side is the Site Access panel which identifies the sites for which the new Site Coordinator is responsible. Click on the checkbox for the sites that the Site Coordinator is responsible for, and a ✓ appears in the checkbox. To deselect a site that was selected in error, click on the checkbox again, and the ✓ is removed.

5. Once all of the fields are entered, click on the Save button.

If New Site Coordinator was selected in error, or if the information entered is not to be saved, click on the Cancel button to close the window.

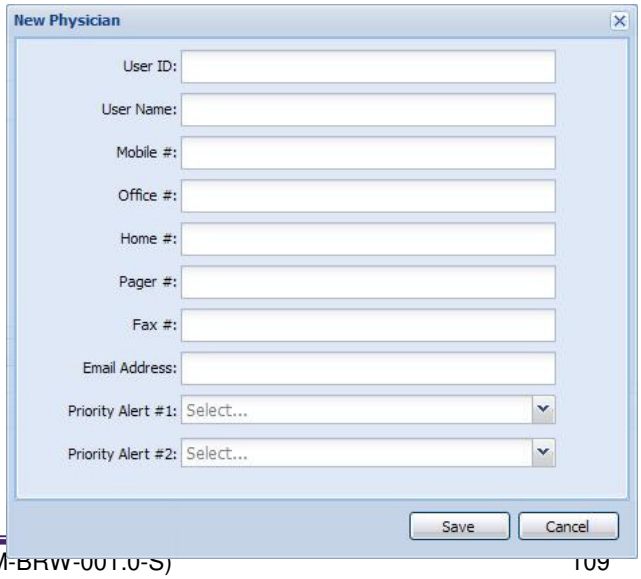
Adding a Physician

One of the actions that can be taken is to add a new Physician who is responsible for patient care at the facility.

To add a new Physician:

1. Click on the New Physician button.

2. The Physician window opens, as shown here:



3. Fill out each of the fields with the information to define the new Physician. These fields include:

   a. **User ID** - This is the identification that the user enters to log into the system.

b. **User Name** – This is the name of the user.

c. **Mobile #** – This is the cell phone number for the new user.

d. **Office #** – This is the office telephone number for the new user.

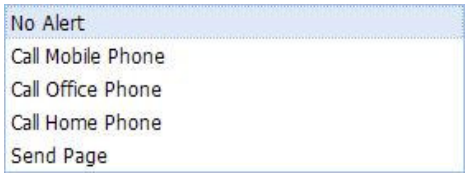
e. **Home #** – This is the home telephone number for the new user.

f. **Pager #** – This is the pager number for the new user.

g. **Fax #** – This is the fax number for the new user.

h. **E-mail Address** – This is the e-mail address for the new user.

i. **Priority Alert #1** – This allows the physician to select the primary alert method to be used when they need to be contacted regarding an urgent finding or critical study for one of their patients. Click on the arrow next to the field and select the desired method. The choices are:



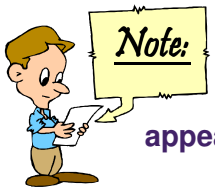
   i. **No Alert** – When this is selected the physician will not be contacted for urgent findings or critical studies.

   ii. **Call Mobile Phone** – When this is selected the physician will be contacted via the mobile phone number that is entered.

   iii. **Call Office Phone** – When this is selected the physician will be contacted via the office phone number that is entered.

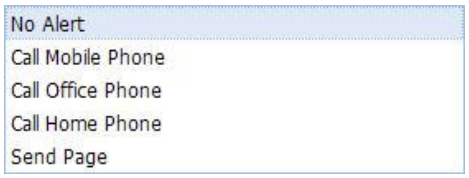
   iv. **Call Home Phone** – When this is selected the physician will be contacted via the Home telephone number that is entered.

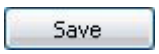
   v. **Send Page** – When this is selected the physician will be contacted via their pager.



Note that a shortcut to finding the information in a drop-down menu is to begin typing the name in the field, and as characters are matched the name appears. Click on the correct name when it appears.

j. **Priority Alert #2** – This allows the physician to select the secondary alert method to be used when they need to be contacted regarding an urgent finding or critical study for one of their patients. Click on the arrow next to the field and select the desired method.



4. Once all of the fields are entered, click on the 

button.

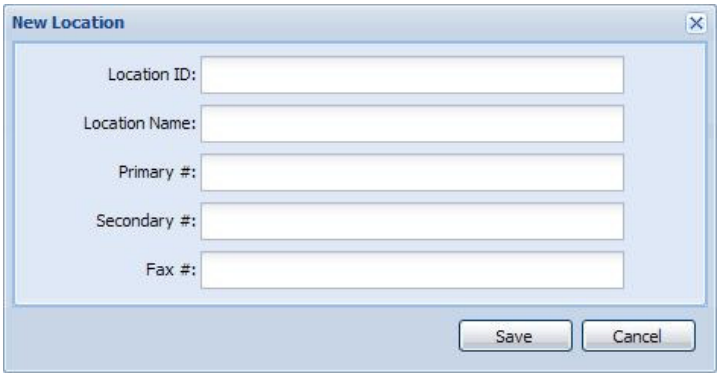
If New Physician was selected in error, or if the information entered is not to be saved, click on the Cancel button to close the window.

Adding a New Location

One of the actions that can be taken is to add a new location in the hospital or imaging site, such as an emergency room, where multiple people could actually be looking for the results from the Radiologist. This means that any physician or nurse in that location can be notified of an urgent finding or critical study for a patient in that location.

To add a new Location:

1. Click on the New Location button.
2. The New Location window opens, as shown here:



3. Fill out each of the fields with the information to define the new Location. These fields include:
   a. **Location ID** - This is the identification that the user at the specific location enters to log into the system.
   b. **Location Name** – This is the name of the location, such as Emergency Room One, or ER West.
   c. **Primary #** – This is the main contact number for the location.
   d. **Secondary #** – This is the second contact number for the location.
   e. **Fax #** – This is the fax number for the new location.

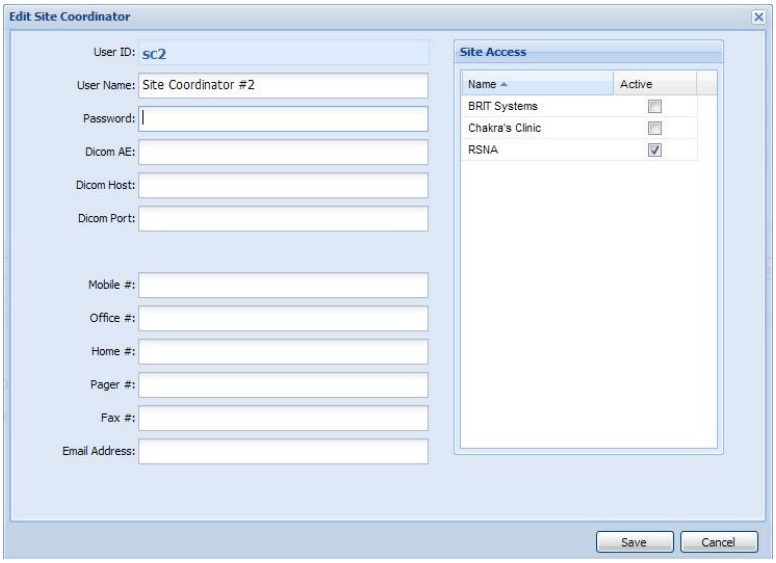
Editing an Existing User

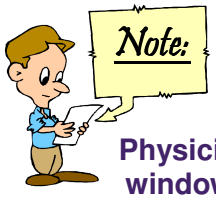
One of the actions that can be taken is to modify an existing user to change their phone numbers or other user-specific information.

To edit an existing user, follow these steps:

1. Click on the user to modify.
2. Click on the Edit User button.

3. The Edit User window opens, as shown here:





Be aware that the window displayed is relevant to the user selected to modify. If a Physician is selected, then this window opens as an Edit Physician window.

4. Modify each of the fields with the information that need to be edited for the user. The fields that can be changed include:

   a. **User Name** – This is the name of the user.

   b. **Password** – A new password for the user can be entered here.

   c. **DICOM AE** – This field is used to change the DICOM Application Entity title for the user's workstation.

   d. **DICOM Host** – This field is used to change the DICOM host name to which the user's workstation is communicating.

   e. **DICOM Port** – This field is used to change the DICOM port number on which the user's workstation communicates

   f. **Mobile #** – This field is used to change the cell phone number for the existing user.

   g. **Office #** – This field is used to change the office telephone number for the existing user.

   h. **Home #** – This field is used to change the home telephone number for the existing user.

   i. **Pager #** – This field is used to change the pager number for the existing user.

   j. **Fax #** – This field is used to change the fax number for the existing user.

   k. **E-mail Address** – This is the e-mail address for the existing user.

5. If the Site Access needs to be changed, click on the appropriate checkbox to allow access to the site, which places a ✓ in the checkbox. If the user needs to be removed from the site, there should already be a ✓ in the checkbox, click on the checkbox to remove the ✓.

6. Once all of the fields to be corrected are entered, click on the Save button.

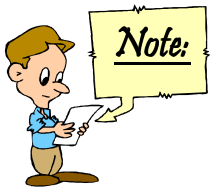
If Edit User was selected in error, if the wrong user was selected, or if the information entered is not to be saved, click on the Cancel button to close the window.

Deleting an Existing User

One of the actions that can be taken is to remove an existing user at the hospital or imaging center for which the Site Coordinator is responsible.

To delete an existing user:

1. Click on the Delete User button.
2. The user is immediately removed from the window.



Be aware there is no confirmation window that opens to confirm the correct user is selected, so be very careful to select the correct user to delete.

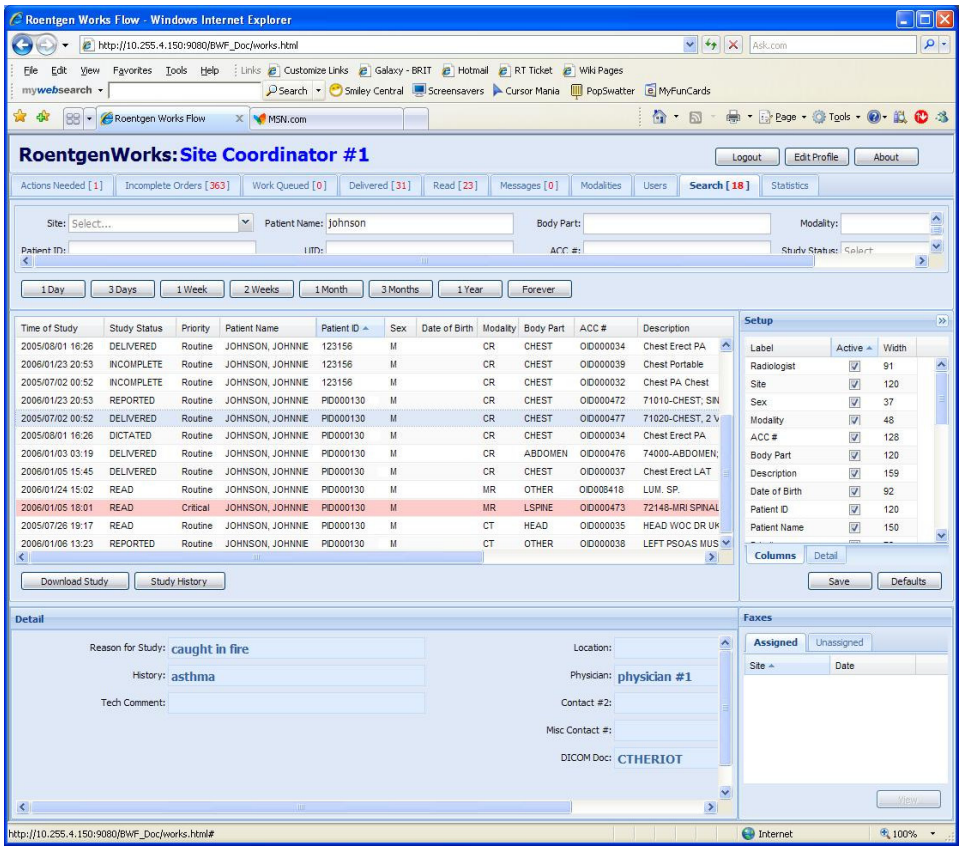
Chapter 12 – Search Tab

The Search tab allows the users to search the entire Roentgen Works database for any patient for whom they have access rights. The search criteria includes patient name, patient ID, body part, modality, accession number, and study status.

This section identifies the components, uses, and features of the Search tab.

Components of the Search Window

The window that opens when the Search tab is selected is shown below:



The number in **red** next to the tab indicates the number of patients listed in that tab that satisfied the search criteria.

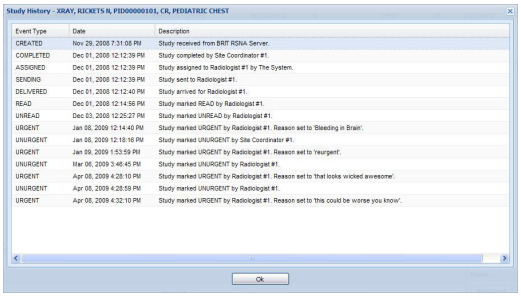
This is generally used when the Site Coordinator is looking for a specific patient's study.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Search tab.

Action Buttons

There are ten buttons available in the Search tab that allows the user to easily search for a patient by a date without having to select a date by a calendar.

- Download Study – This button allows the Site Coordinator to download the selected study to the viewer.
- Study History – This button allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.



- Forever - This button allows the user to search for a patient by all dates from the initial date the system was installed.
- 1 Day – This button allows the Site Coordinator to perform the search for the patient for the past one day.
- 1 Month – This button allows the Site Coordinator to perform the search for the patient for the past one month.
- 1 Week – This button allows the Site Coordinator to perform the search for the patient for the past one week.
- 1 Year – This button allows the Site Coordinator to perform the search for the patient for the past one year.
- 2 Weeks – This button allows the Site Coordinator to perform the search for the patient for the past two weeks.
- 3 Days – This button allows the Site Coordinator to perform the search for the patient for the past three days.
- 3 Months – This button allows the Site Coordinator to perform the search for the patient for the past three months.

Color Coding

Once the studies are listed, they are color coded as follows:

- **Pink** – Indicates that there is an **urgent** or **critical** finding in the study in which the referring physician needs to be notified immediately.
- **White** – Indicates that the study has state of **Routine**.
- **Blue** – Indicates that this is the **currently selected study**. If there is an interface to a Radiologist viewing workstation, such as BRIT Vision, double-clicking on one of these selected patients, automatically downloads the study to the workstation

Selecting the Columns

The columns in the patient list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Search tab includes:

- **ACC#** – Displays the Accession number assigned to the study.
- **Body Part** – Displays the specific body part, or region of interest, on which the study was performed.
- **Date of Birth** – Displays the patient's birth date.
- **Description –** Displays the Study Description as entered either from the modality or from the order.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **Modality** – Identifies the type of modality on which the study was performed.
- **Patient ID** – Displays the Patient's identification number from the sending site.
- **Patient Name** – Displays the Patient's name as sent from the sending site.
- **Priority** – Determines if the study is routine or critical so that the Radiologist knows the importance of the study.
- **Radiologist** – Displays the name of the Radiologist handling the study.

- **Sex** – Identifies the Gender of the patient.
- **Site** – Identifies the facility where the patient study was captured.
- **Study Status** – Identifies the status of the study for the workflow, such as On Hold, Incomplete, Urgent, Delivered, Unread, or Read.
- **Time of Study** – Provides the date and time that the exam was captured at the imaging facility.

To change the columns selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, then the column displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:

- **Contact #2** – Identifies the backup contact to be used if the physician can't be reached.
- **DICOM Doc** – Displays the name of the referring physician as it is reported in the DICOM header of the study.
- **Final Read** – Determines if the Radiologist is to do a final diagnosis on the study, and is identified as a Yes or a No in the Final Read column next to the Study.
- **History** – Provides the brief patient history that was sent with the study.
- **Location** – Identifies the patient location where the physician contact is available, such as the ER, and may be used as a point of contact.
- **Misc Contact #** - Displays an additional telephone or pager number for an additional contact for the referring physician.
- **Physician** – Displays the name of the patient's referring physician.

- **Reason for Hold** – Identifies the explanation from the Radiologist for the study being placed on hold.
- **Reason for Study** – Indicates the reason that the referring physician ordered the study for the patient.
- **Tech Comment** – Provides the text from the Technologist that was entered when the study was captured. This alerts the Radiologist to additional information that the Technologist contributed to the patient's exam.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays on the Patient List. If the checkbox currently does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the Search Tab

There are several actions that can be taken with the patients listed in the

list which include:

- **Searching for a patient**
- **Downloading the study**
- **Viewing the Study history**

This section provides the steps to perform each of these daily tasks in the

tab.

Searching for a Patient

The Site Coordinator may need to search for a study for a patient that was previously saved, and this can be done with the Search menu just beneath the Search tab.

There are several **categories** that can be entered to search on, which include:

- **Site**
- **Patient ID**
- **Patient Name**
- **UID**
- **Body Part**
- **Accession #**
- **Modality**
- **Study Status**

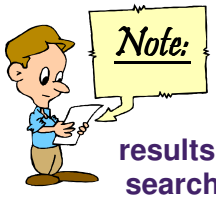
There are also several **timeframes** available in which to search for the patient's study. These are in the form of buttons beneath the search criteria panel, and include the following:

- 1 Day – Starts the search going back to the previous day.
- 3 Days – Starts the search going back the previous three days.
- 1 Week – Starts the search going back one week.
- 2 Weeks – Starts the search going back two weeks.
- 1 Month – Starts the search going back 30 days.
- 3 Months – Starts the search going back 90 days.
- 1 Year – Starts the search going back 365 days. (On a leap year, it will be off by one day.)
- Forever – Starts the search going back to the time that the PACS System was implemented and studies were stored.

To start the search:

1. Enter the **Search criteria** in the Search panel.
2. Click on the desired **time frame** in which to search; one day, three days, one week, two weeks, one month, three months, one year, or forever.
3. The results are displayed in the search window below the time frame buttons.
4. Click on the desired study.

5. To bring the study to the local workstation for viewing, click on the Download Study button, and the selected study is sent to the viewer.



Be aware that if the user selects a specific timeframe for the search, such as two weeks, and the actual study was performed two weeks and one day previous, the desired study may not be found. It is always helpful if no results were found, to try the next time frame, such as one month. The system searches the number of days specifically by the date and counts back.

Downloading the Selected Study

Once the Site Coordinator has found the study for the patient, this Download Study button allows them to copy the selected study to the viewer.

To download the selected study:

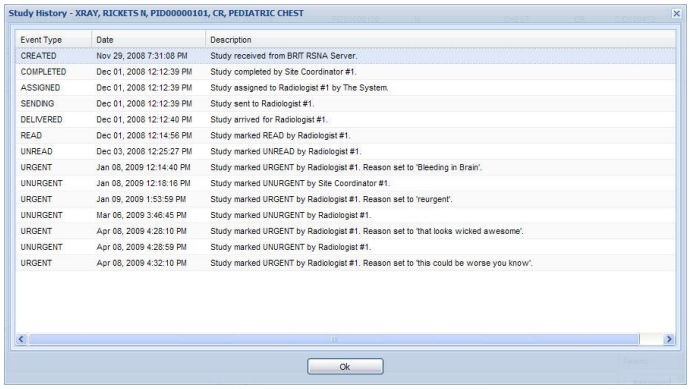
1. Enter the **Search criteria** in the Search panel.
2. Click on the desired **time frame** in which to search; one day, three days, one week, two weeks, one month, three months, one year, or forever.
3. The results are displayed in the search window below the time frame buttons.
4. Click on the desired study.
5. To bring the study to the local workstation for viewing, click on the Download Study button, and the selected study is sent to the viewer.

Viewing the Study History

The Study History for the selected study allows the user to see the detailed history of the study, such as when it was created, completed, to whom it was assigned, when it was sent, when it was delivered, when it was read, each time the status was reset, and each status setting.

To view the study history:

1. Make sure the correct patient study is selected.
2. Click on the Study History button.


Study History - XRAY, RICKETS II, PID00000101, CR, PEDIATRIC CHEST
Event Type | Date | Description
CREATED | Nov 29, 2008 7:31:08 PM | Study received from BRIT RSNA Server.
COMPLETED | Dec 01, 2008 12:12:39 PM | Study completed by Site Coordinator #1.
ASSIGNED | Dec 01, 2008 12:12:39 PM | Study assigned to Radiologist #1 by The System.
SENDING | Dec 01, 2008 12:12:39 PM | Study sent to Radiologist #1.
DELIVERED | Dec 01, 2008 12:12:40 PM | Study arrived for Radiologist #1.
READ | Dec 01, 2008 12:14:56 PM | Study marked READ by Radiologist #1.
UNREAD | Dec 03, 2008 12:25:27 PM | Study marked UNREAD by Radiologist #1.
URGENT | Jan 08, 2009 12:14:40 PM | Study marked URGENT by Radiologist #1. Reason set to 'Bleeding in Brain'.
UNURGENT | Jan 08, 2009 12:18:16 PM | Study marked UNURGENT by Site Coordinator #1.
URGENT | Jan 09, 2009 1:53:59 PM | Study marked URGENT by Radiologist #1. Reason set to 'reurgent'.
UNURGENT | Mar 06, 2009 3:46:45 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:28:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'that looks wicked awesome'.
UNURGENT | Apr 08, 2009 4:28:59 PM | Study marked UNURGENT by Radiologist #1.
URGENT | Apr 08, 2009 4:32:10 PM | Study marked URGENT by Radiologist #1. Reason set to 'this could be worse you know'.
Ok

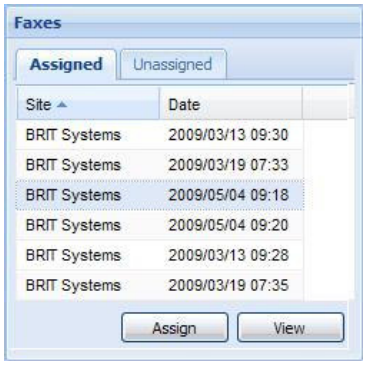
3. The Study history pop-up window opens and displays all events that have been posted regarding the study. This could include such events as:

   - When the study was **created**
   - When the study was **completed by the Site Coordinator**
   - When the study was **assigned**
   - When the study was **sent**
   - When the study was **delivered**
   - When the study was **read**
   - When the study was marked **urgent**
   - When they study was **put "on-hold"**

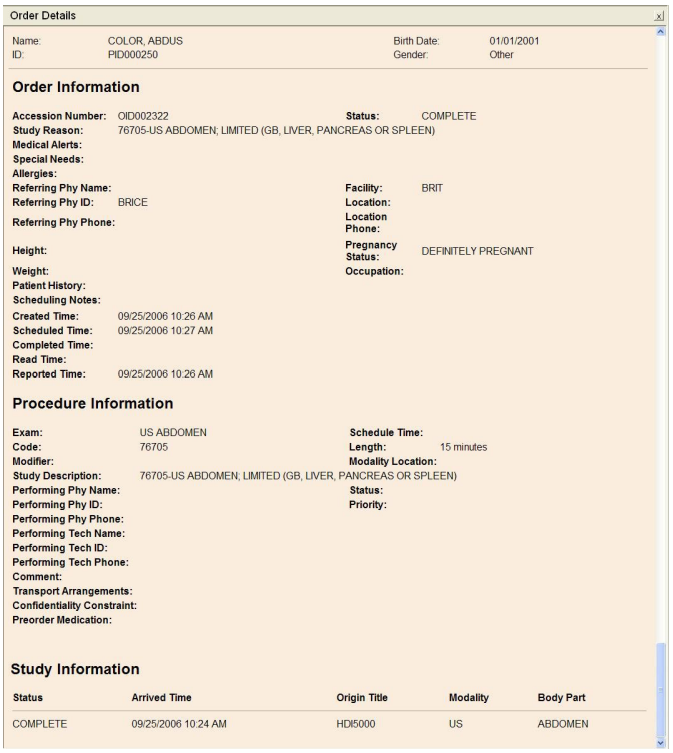
4. When the desired information is read, click on the Ok button to close the window.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.



In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the user has read the information, click on the ⊠ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.

Chapter 13 – Statistics Tab

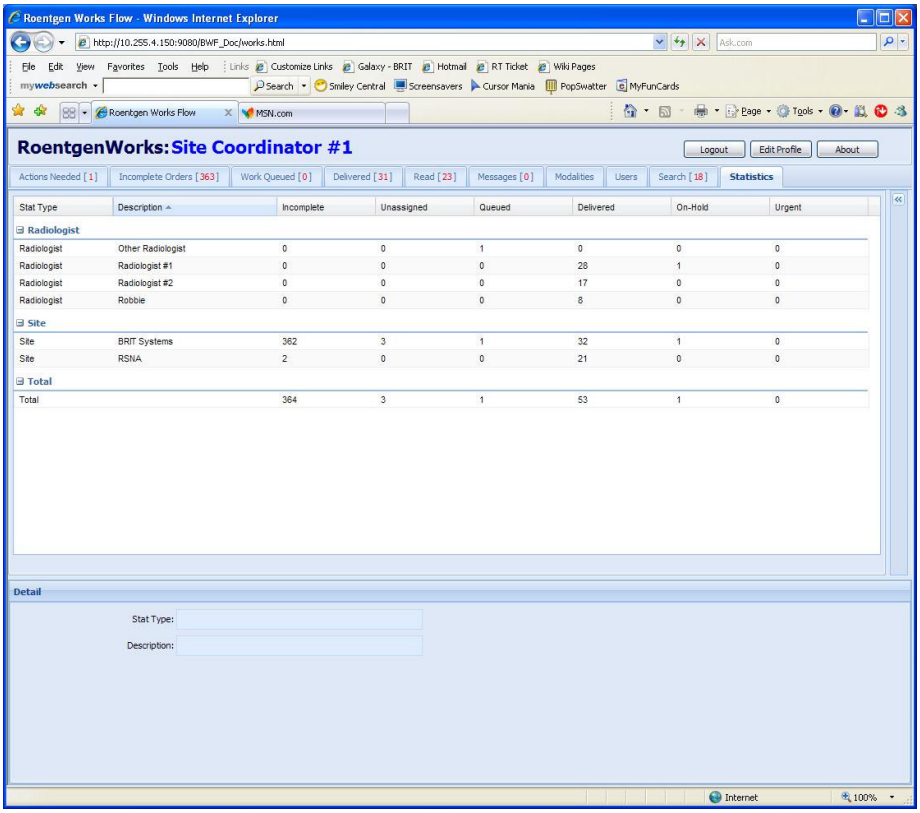
The statistics tab allows the users to get a snapshot of the current workflow for the various sites. Only the studies that have not yet been marked as “Read” are displayed on the list.

The Site Coordinator sees studies for all the sites they are responsible for accessing.

This section identifies the components, uses, and features of the Statistics tab.

Components of the Statistics Window

The window that opens when the Statistics tab is selected is shown below:



This window provides the statistics for all the users that are currently logged into the system, as they stand at the time the Statistics tab was selected.

Each Site Coordinator sees the studies that are assigned to the Radiologists authorized to read for their specific site.

This section provides information on the buttons, color coding, changing the columns, and changing the details for the Statistics tab.

Action Buttons

There are no buttons in the Statistics tab.

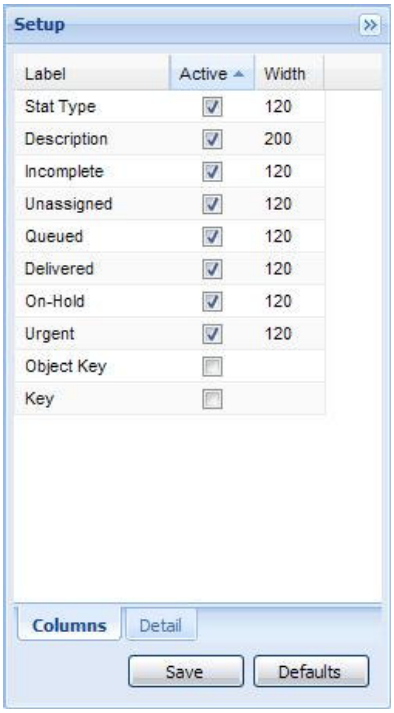
Color Coding

There is no special color coding in the Statistics tab.

Selecting the Columns

The columns in the patient list can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the Columns button is selected.

Any of the columns can be selected, but the system default information shown for these studies in the Statistics tab includes:



- **Delivered** – Indicates the number of studies that were successfully delivered to the recipients.
- **Description** – Displays the name of the User logged into the system for which the statistics were built.
- **Incomplete** – Provides the summary of incomplete studies that are assigned to the user and not finished.
- **On-Hold** – Identifies the number of studies that the Radiologist has placed "on-hold" because further information is needed to allow them to complete the diagnosis.
- **Queued** – Provides a summary of all the studies that have been delivered to the Radiologist, and are waiting to be read.
- **Stat Type** – Identifies the user or site for the studies' statistics.
- **Unassigned** – Identifies the number of unassigned studies that are available, and generally only applies to the sites rather than the users.
- **Urgent** – Identifies the number of studies assigned to each site and user that are tagged as Urgent by the Radiologist after their diagnosis is completed.

To change the columns selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired heading. If the checkbox has a ✓, then the column displays on the Patient List. If the checkbox currently does not have a ✓, the column is not displayed on the Patient List.

The columns can then be moved, or resized according to personal preference.

For a complete list of available columns, see the section Available Columns.

Detail Information

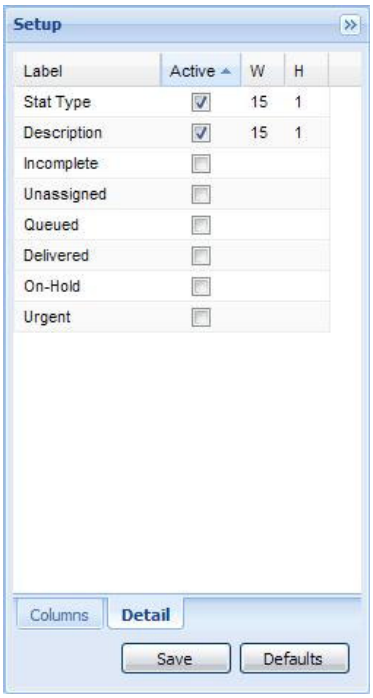
The Detail information at the bottom provides additional specific information about the selected study.

This Detail panel can be customized according to individual preferences, but there are several that have been selected to be identified as system defaults, and are selected when the system is delivered, or when the

button is selected.

The system default information shown for these studies in the

window include:



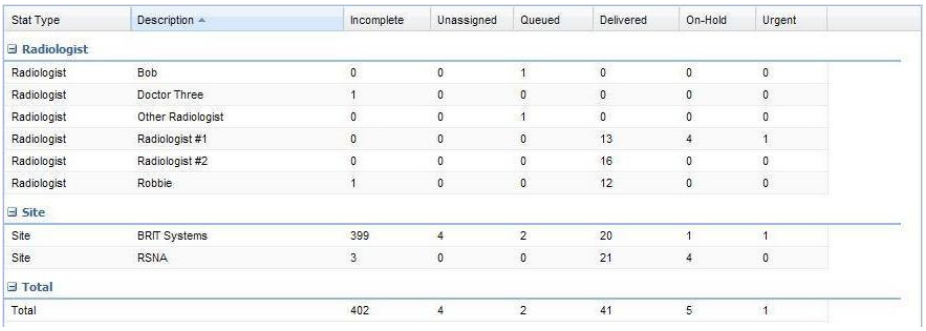
- **Stat Type** – Identifies the user or site for the studies' statistics.
- **Description** – Displays the name of the User logged into the system for which the statistics were built.

To change the Detail selections, open the Setup panel by clicking on the to the right, and clicking on the checkbox next to the desired detail. If the checkbox has a ✓, then the detail displays on the Patient List. If the checkbox currently does not have a ✓, the detail is not displayed on the Patient List.

For a complete list of the Detail selections available, see the section Available Detail Selections.

Taking Actions in the Statistics Tab

The only action available in the Statistics tab is to view the statistics which are shown in the various columns: The statistics that can be shown, since they are customizable in the Setup panel, include the following:



Stat Type	Description	Incomplete	Unassigned	Queued	Delivered	On-Hold	Urgent
Radiologist							
Radiologist	Bob	0	0	1	0	0	0
Radiologist	Doctor Three	1	0	0	0	0	0
Radiologist	Other Radiologist	0	0	1	0	0	0
Radiologist	Radiologist #1	0	0	0	13	4	1
Radiologist	Radiologist #2	0	0	0	16	0	0
Radiologist	Robbie	1	0	0	12	0	0
Site							
Site	BRIT Systems	399	4	2	20	1	1
Site	RSNA	3	0	0	21	4	0
Total							
Total		402	4	2	41	5	1

- **Stat type** – This column displays the type of user or site.
- **Description** – This column displays the name of the User logged into the system for which the statistics were built.
- **Incomplete** – This column displays the number of studies for each user and site that have a status of incomplete.
- **Unassigned** – This column displays the number of studies for each user and site that have not yet been assigned to a specific Radiologist.
- **Queued** – This column displays the number of studies for each user and site that are still in the Work Queue waiting to be delivered to a Radiologist.
- **Delivered** – This column displays the number of studies for each user and site that have been delivered to a specific Radiologist and are waiting to be read.
- **On-Hold** – This column displays the number of studies for each user and site that have been placed on hold by the Radiologist awaiting clarification or additional information about the patient.
- **Urgent** – This column displays the number of studies for each user and site that have been tagged as “Urgent” by the Radiologist indicate that the referring physician needs to be contacted immediately in regards to a problem found on the patient’s study, and is critical for patient care.

Chapter 14 – Viewing the Faxes

Many times the Order information is not passed along with the Study, and must be faxed from the site by the Site Coordinator or the Technologist. Once the fax is sent, generally it is assigned to the appropriate study by the Site Coordinator or Technologist, and it appears in the lower right side of the window in the Faxes section. Once the fax is available, it is stored on a server and available for viewing by the user. This section describes the Assigned Faxes, the Unassigned Faxes, and Viewing the faxes.

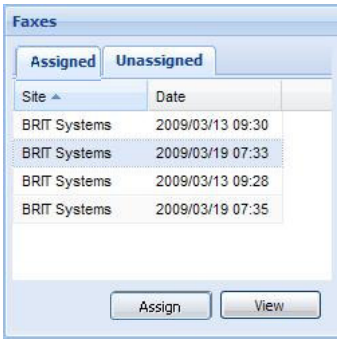
Sending Paper-based Information

If the Order information is not passed along, and the information is unavailable, a hard copy of the order can be faxed to the Radiologist. This can be accomplished by:

1. Sending the paper via fax to the fax server.
2. Viewing the list of unassigned faxes.
3. Assigning the appropriate ones to the study.

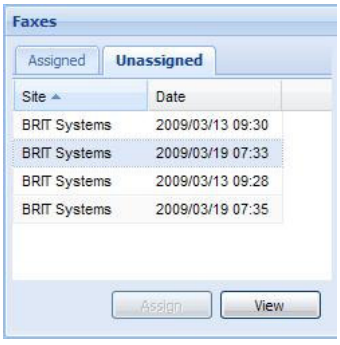
There is a time stamp on the fax and it should help to match the fax to the appropriate study.

Assigned Faxes



To get the list of the faxes that have been assigned, click on the Assigned tab, and the list appears in the Faxes section. These are faxes that are assigned to specific studies in the list.

To Assign Unassigned Faxes



To get the list of the faxes that have been not been assigned, click on the Unassigned tab, and the list appears in the Faxes section.

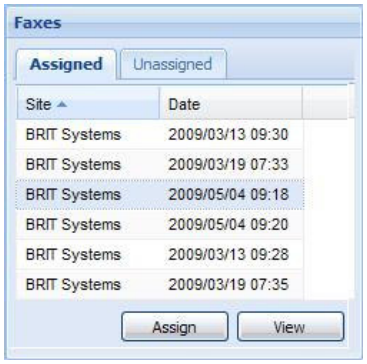
To assign the fax, the user must have permission to perform this function, and the Assign button is available.

To assign the fax:

1. Click on the specific Order information.
2. Click on the Unassigned tab.
3. A list of studies is presented, click on the study, and click on the Assign button.
4. The selected fax is assigned to the study and moved to the Assigned tab.

Viewing the Faxes

If a fax is received from the Site Coordinator to clarify missing information, the fax can be viewed from the Faxes panel in the lower right of the window.



Typically the fax is assigned to a study by the Site Coordinator and is shown in the Assigned tab.

In order **to view the fax,** follow these steps:

1. Click on the appropriate study
2. Click on the View button.
3. The Fax opens in a separate window and displays the details, as shown to the left:
4. Once the desired information is read, click on the ✕ at the top right to close the window.

For faxes that are not assigned, they appear in the Unassigned tab. To assign the fax:

1. Click on the appropriate study.
2. Click on the appropriate fax.
3. Click on the Assign button.
4. The fax now appears under the Assigned tab.